

Compal Confidential

Schematics Document

AUBURNDALE/CLARKSFIELD with
Intel IBEX PEAK-M core logic

Dior DIS

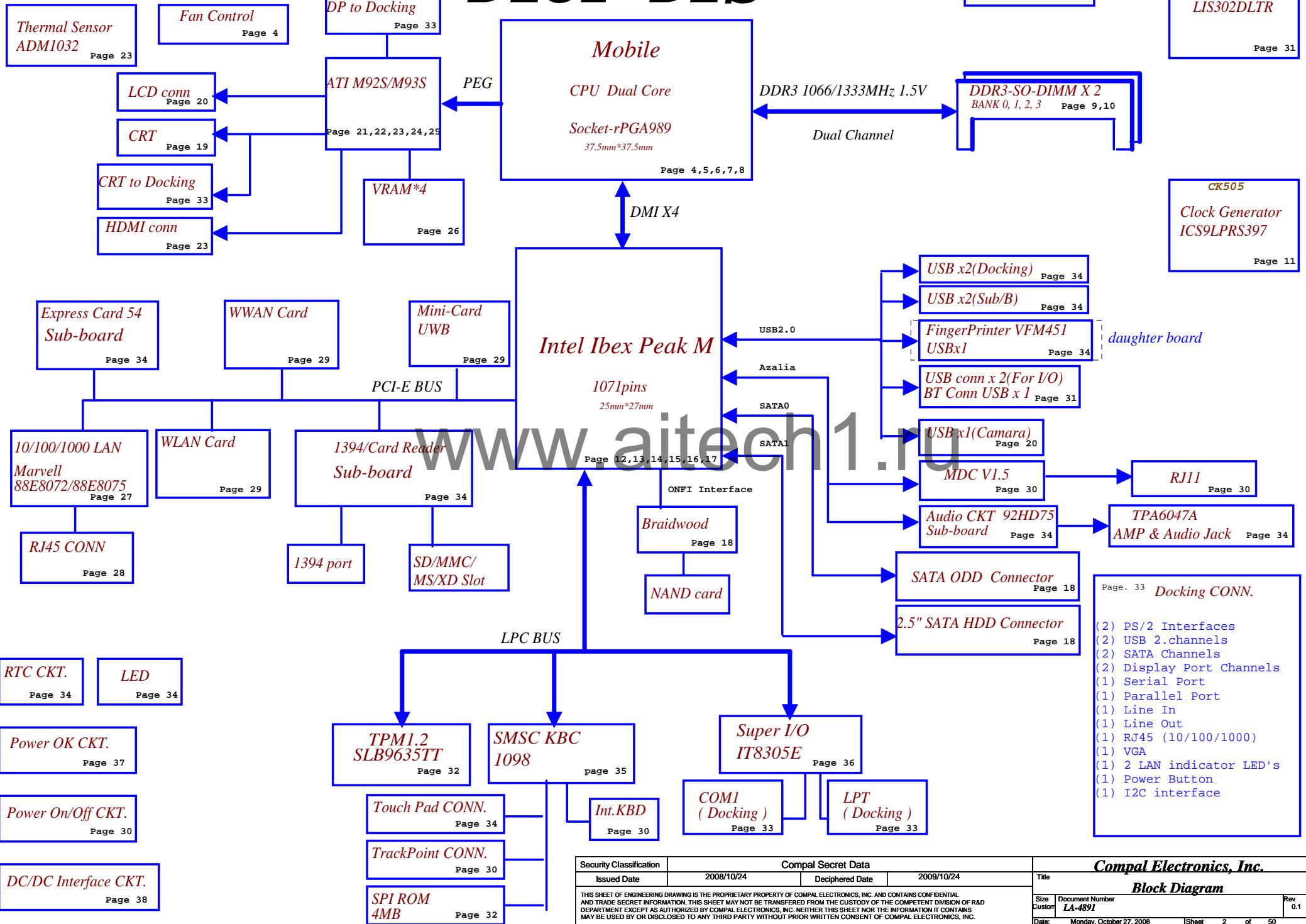
2008-10-30

REV:0.1

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	產出日期	
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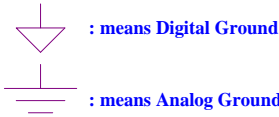
Dior DIS



Voltage Rails (O MEANS ON X MEANS OFF)

power plane State	+RTCVCC	+B +3VL	+5VALW +3VALW	+1.5V +0.75V	+5VS +3VS +1.5VS +NVVDD +VCCP +CPU_CORE +1.05VS +1.8VS
S0	O	O	O	O	O
S1	O	O	O	O	O
S3	O	O	O	O	X
S5 S4/AC	O	O	O	X	X
S5 S4/ Battery only	O	O	X	X	X
S5 S4/AC & Battery don't exist	O	X	X	X	X

Symbol Note :



Install below 43 level BOM structure for ver. 0.1

- DEBUG@ : means just build when PCIE port 80 CARD function enable. Remove before MP
- M92@ : Install for M92 Graphic controller
- 8072@ : Install for 8072 NIC controller
- 1098@ : Install for 1098 KBC controller
- CK32@ : Install for 32 pin CLOCK GEN

Install below 45 level BOM structure for ver. 0.1

- 45@ : means just put it in the BOM of 45 level.

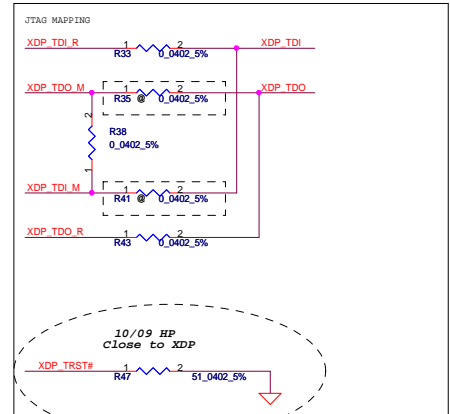
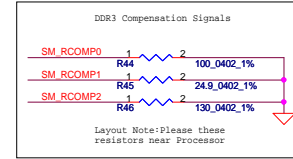
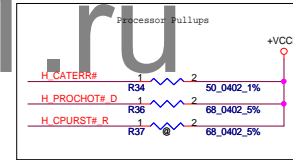
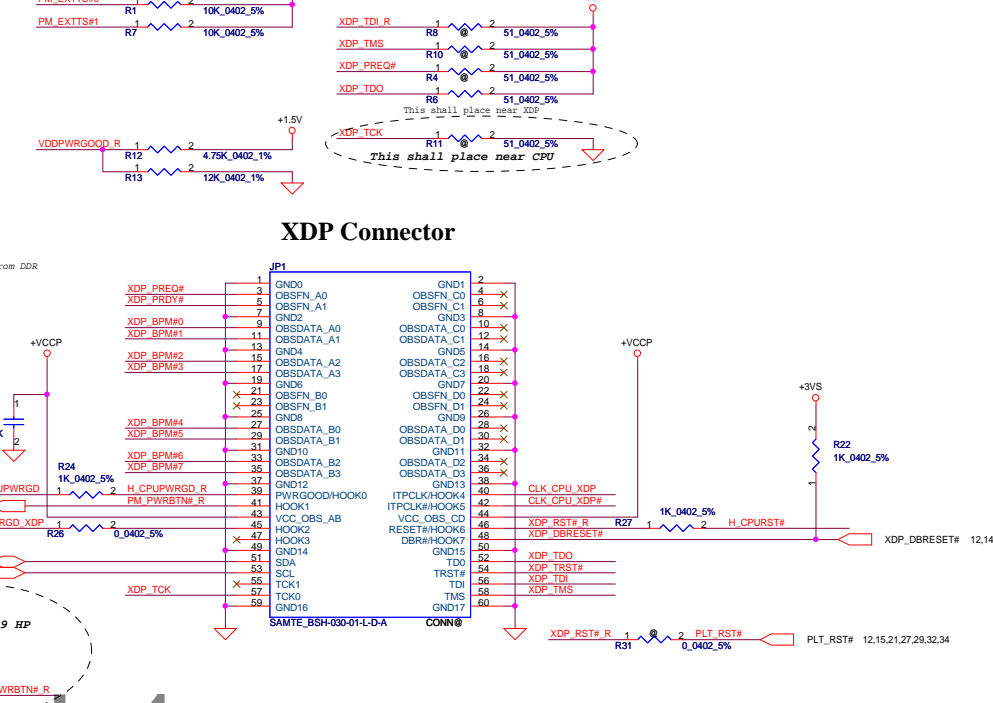
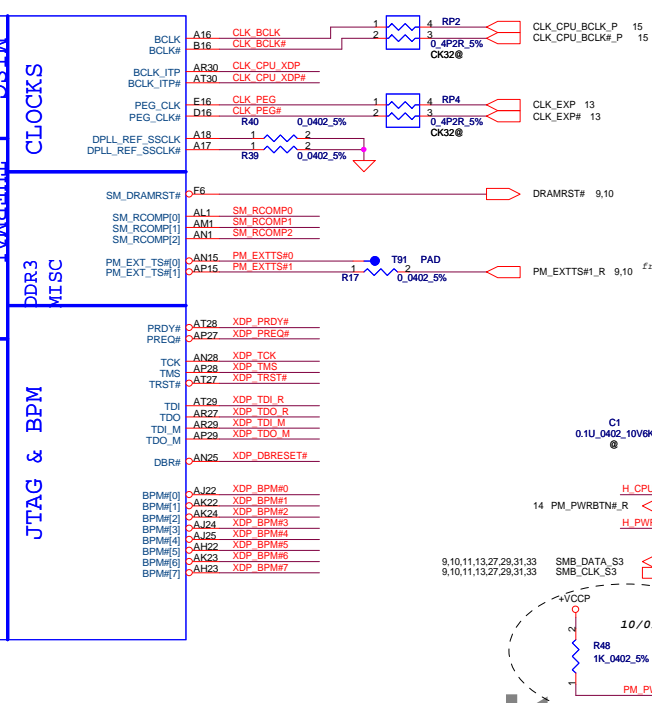
Reserve below BOM structure for ver. 0.1

- @ : means just reserve , no build
- CONN@ : means ME part.
- M93@ : Install for M93 Graphic controller
- 8075@ : Install for 8075 NIC controller
- 1091@ : Install for 1091 KBC controller
- CK72@ : Install for 72 pin CLOCK GEN

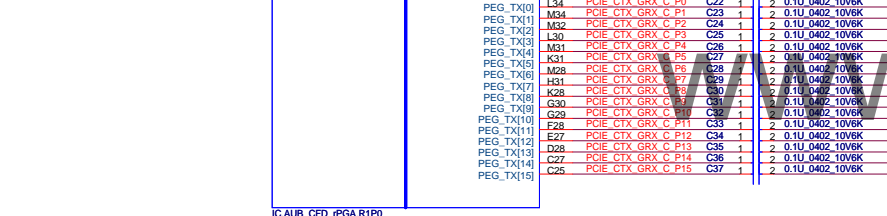
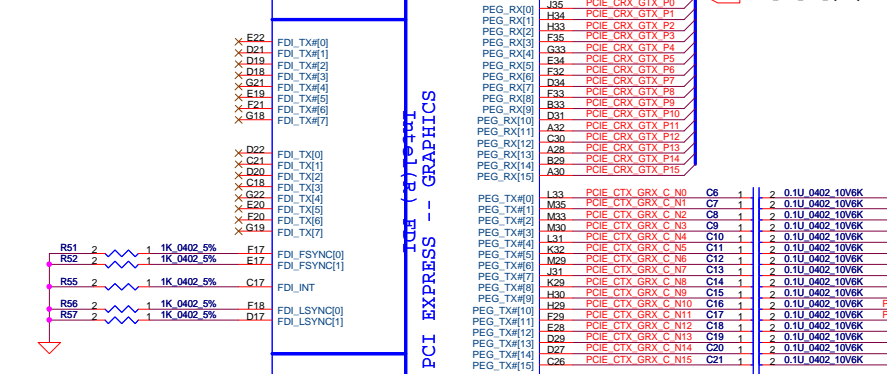
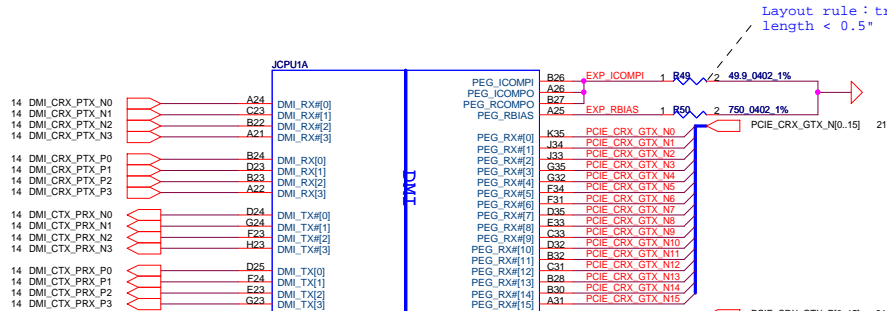
SMBUS Control Table

	SOURCE	BATT	XDP	SODIMM	CLK CHIP	MINI CARD	DOCK	NIC	THERMAL SENSOR	G-SENSOR
SMB_EC_CK1 SMB_EC_DAI	SMSC1098	V	X	X	X	X	X	X	X	X
SMBCLK SMBDATA	Calpella	X	V	V	V	V	V	V	X	V
SML0CLK SML0DATA	Calpella	X	X	X	X	X	X	X	X	X
SML1CLK SML1DATA	Calpella	X	X	X	X	X	X	X	V	X

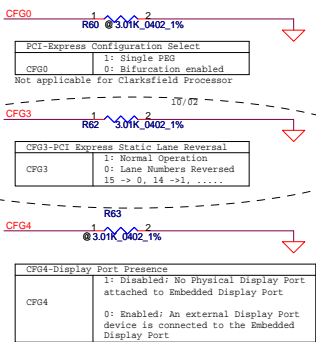
20_0402_1% 1 R2 zCOMP3 AT23 JCPU1B
 20_0402_1% 1 R0 zCOMP2 AT24 COMP3
 49.9_0402_1% 1 R3 zCOMP1 G16 COMP1
 49.9_0402_1% 1 R5 zCOMP0 AT26 COMP0
 PAD T1 TP_SKTOCC# AH24 SKTOCC#
 H_CATERR# AK14 CATERR#
 15 H_PECI R14 2 H_PECI_ISO AT15 PECI
 47 H_PROCHOT# R15 2 H_PROCHOT#_D AN26 PROCHOT#
 15 H_THERMTRIP# R18 2 H_THERMTRIP#_R AK15 THERMTRIP#
 H_CPURST# R18 2 H_CPURST#_R AP26 RESET_OBS#
 14 H_PM_SYNC R20 2 H_PM_SYNC_R AL15 PM_SYNC
 H_CPUWPRGD R21 2 VCCPWPGOOD_1 AN14 VCCPWPGOOD_1
 15 H_CPUWPRGD R23 2 VCCPWPGOOD_0 AN27 VCCPWPGOOD_0
 14 PM_DRAM_PWRGD R25 2 VDDPWPGOOD_R AK13 SM_DRAMPWRGOK
 37 VTTPWPGOOD AM15 VTTPWPGOOD
 H_PWRGD_XDP R29 2 H_PWRGD_XDP_R AM26 TAPPWPGOOD
 15 BUF_PLT_RST# R30 2 PLT_RST#_R AL14 RSTIN#
 24.9K_0402_1% R32 IC_AUB_CFD_PGA_R1P0
 12.4K_0402_1%



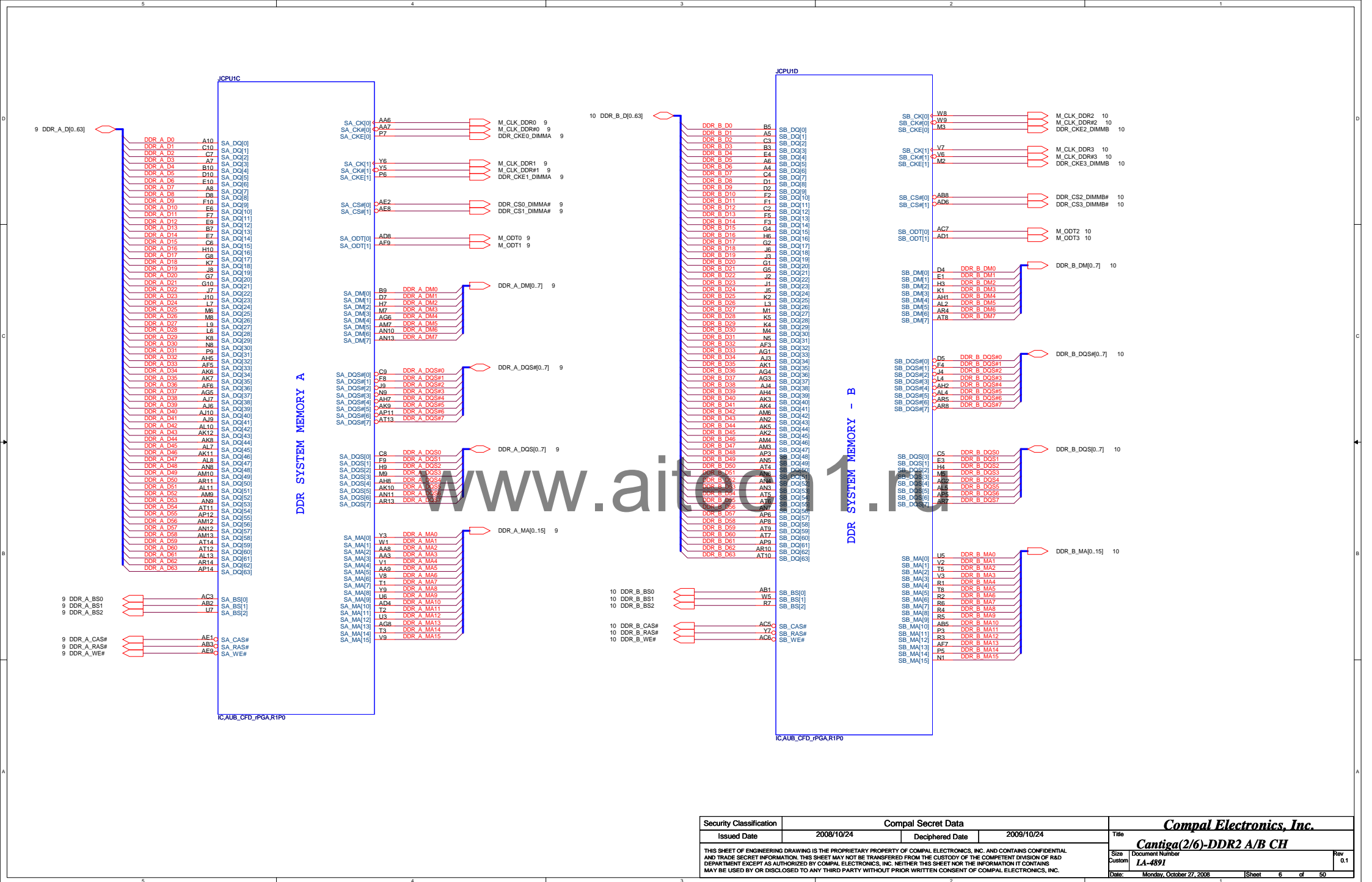
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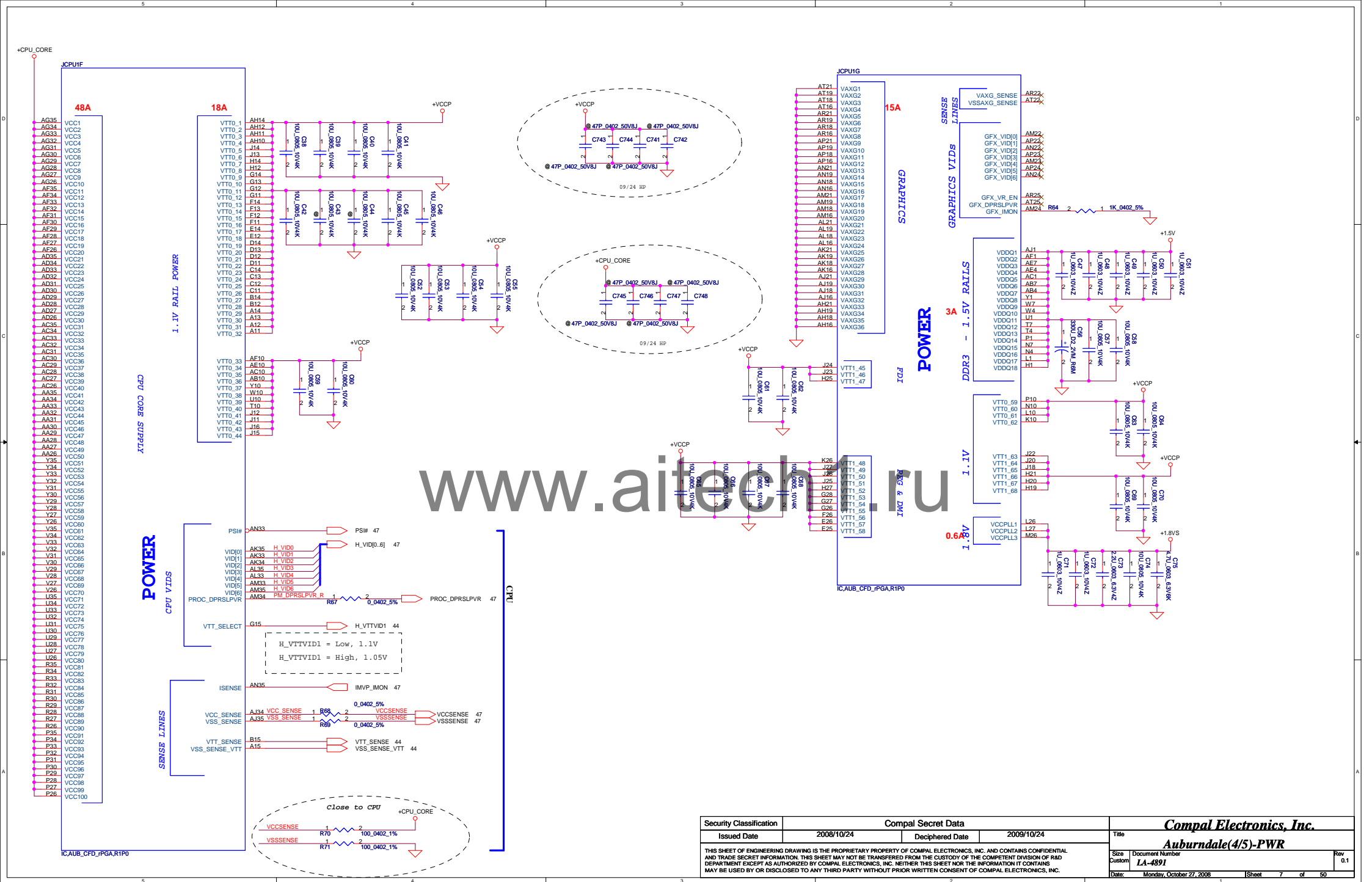
CFG Straps for PROCESSOR



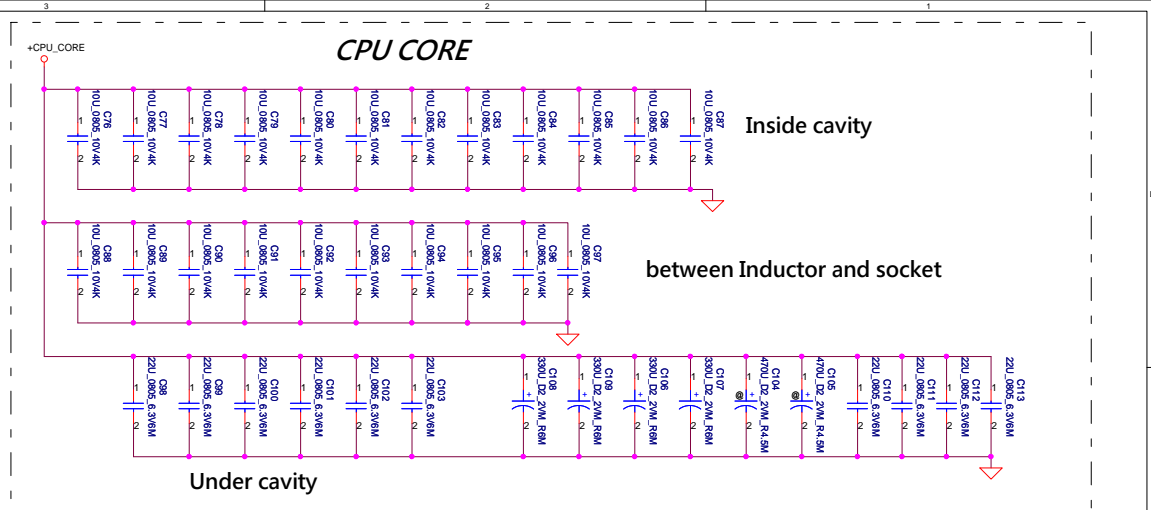
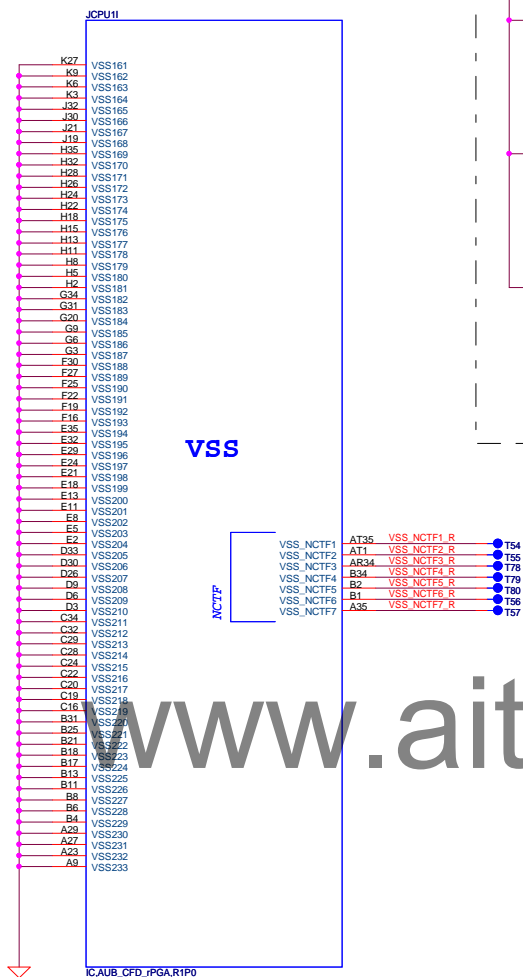
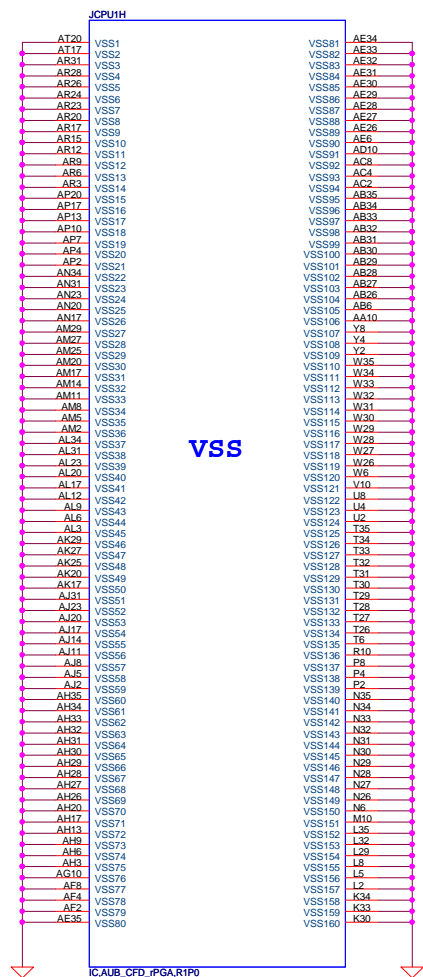
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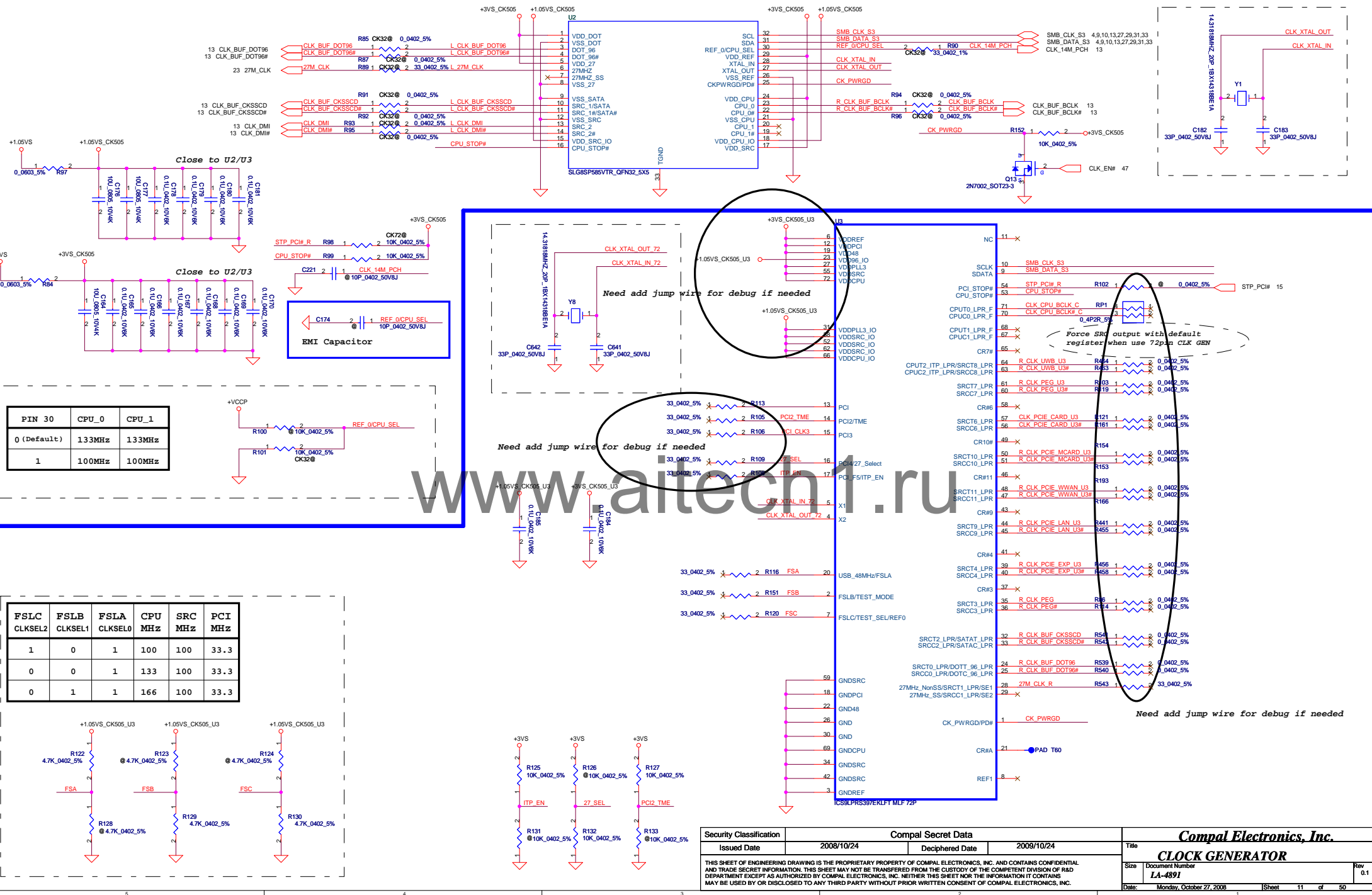


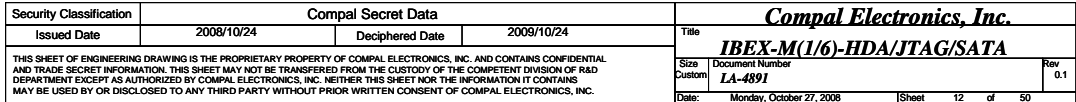
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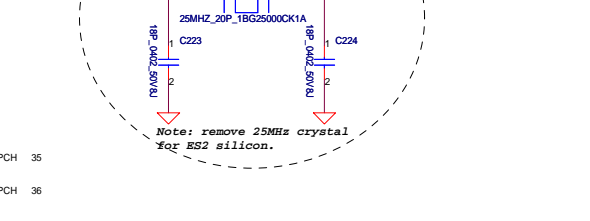
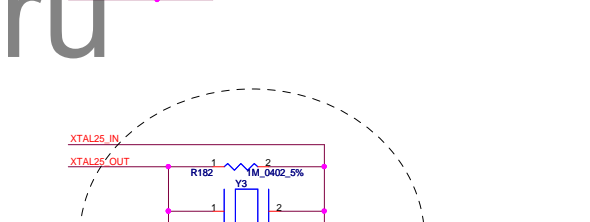
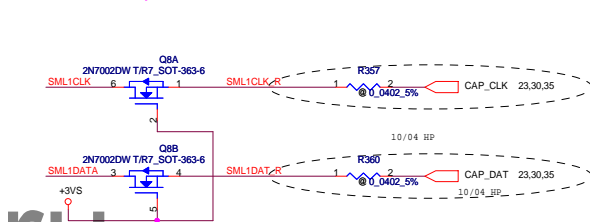
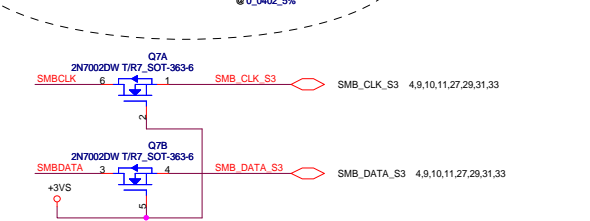
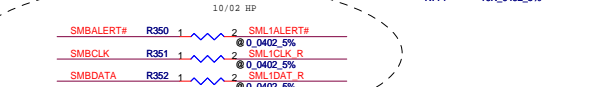
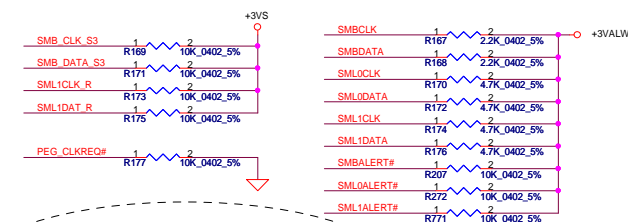
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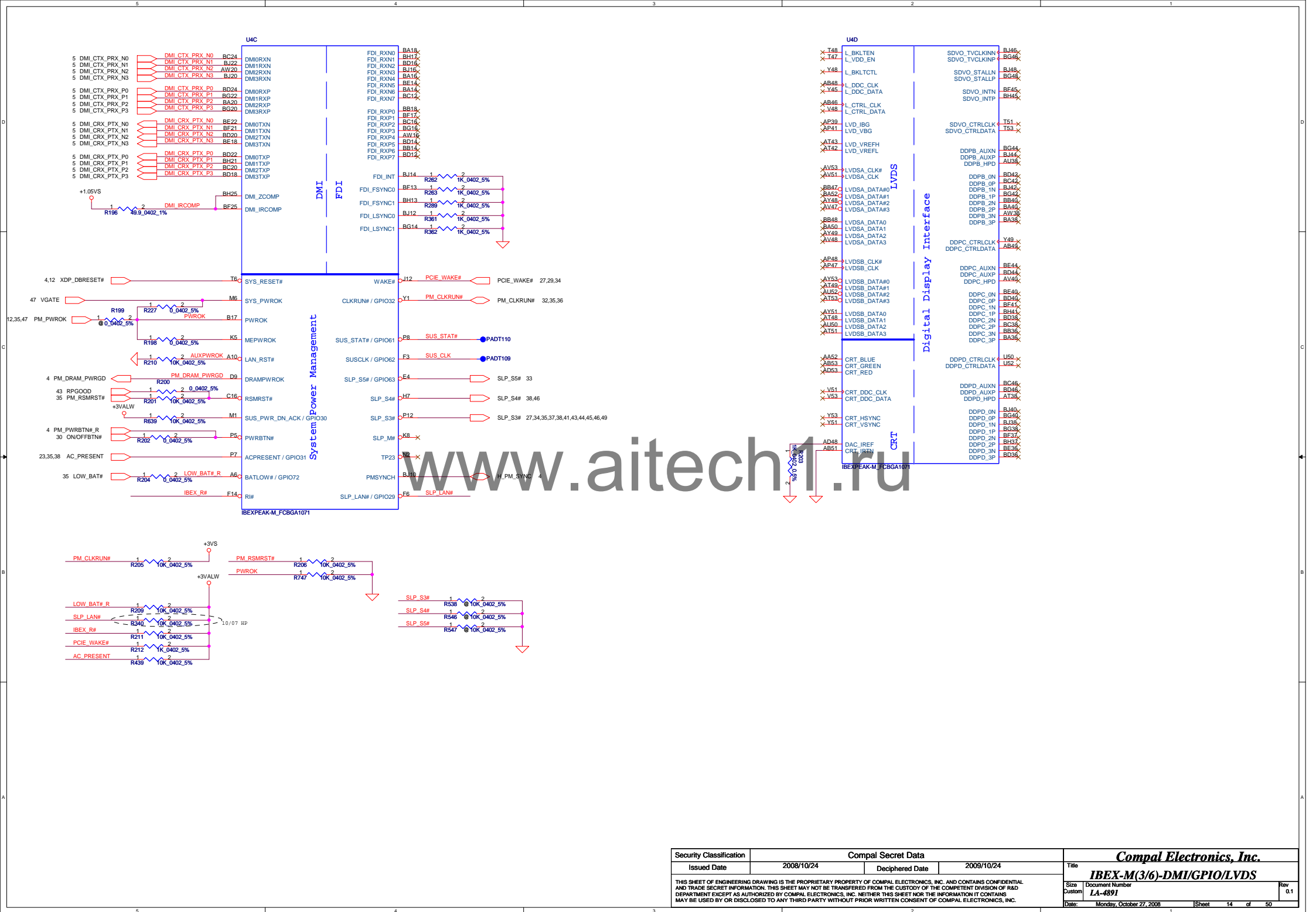
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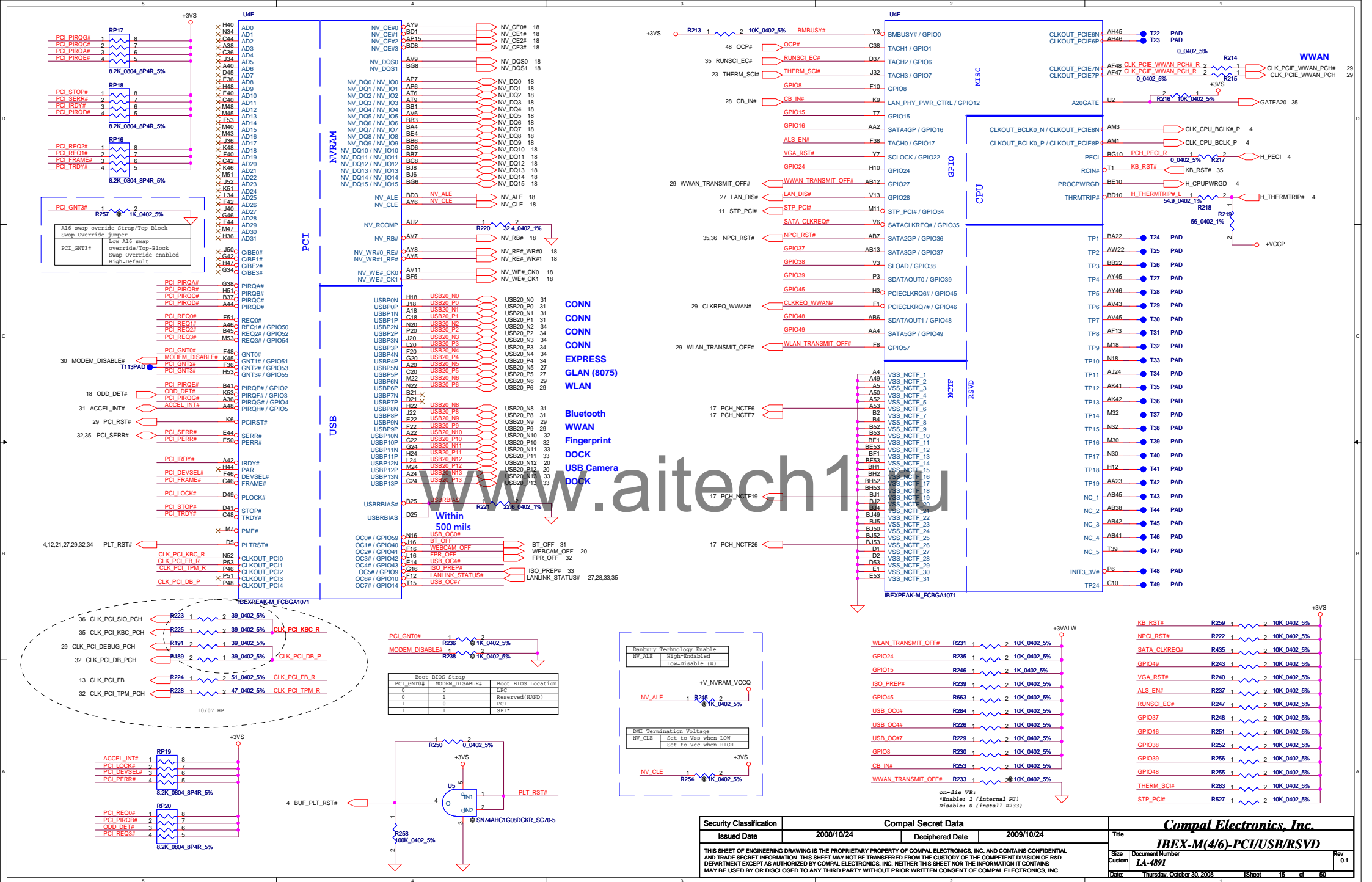


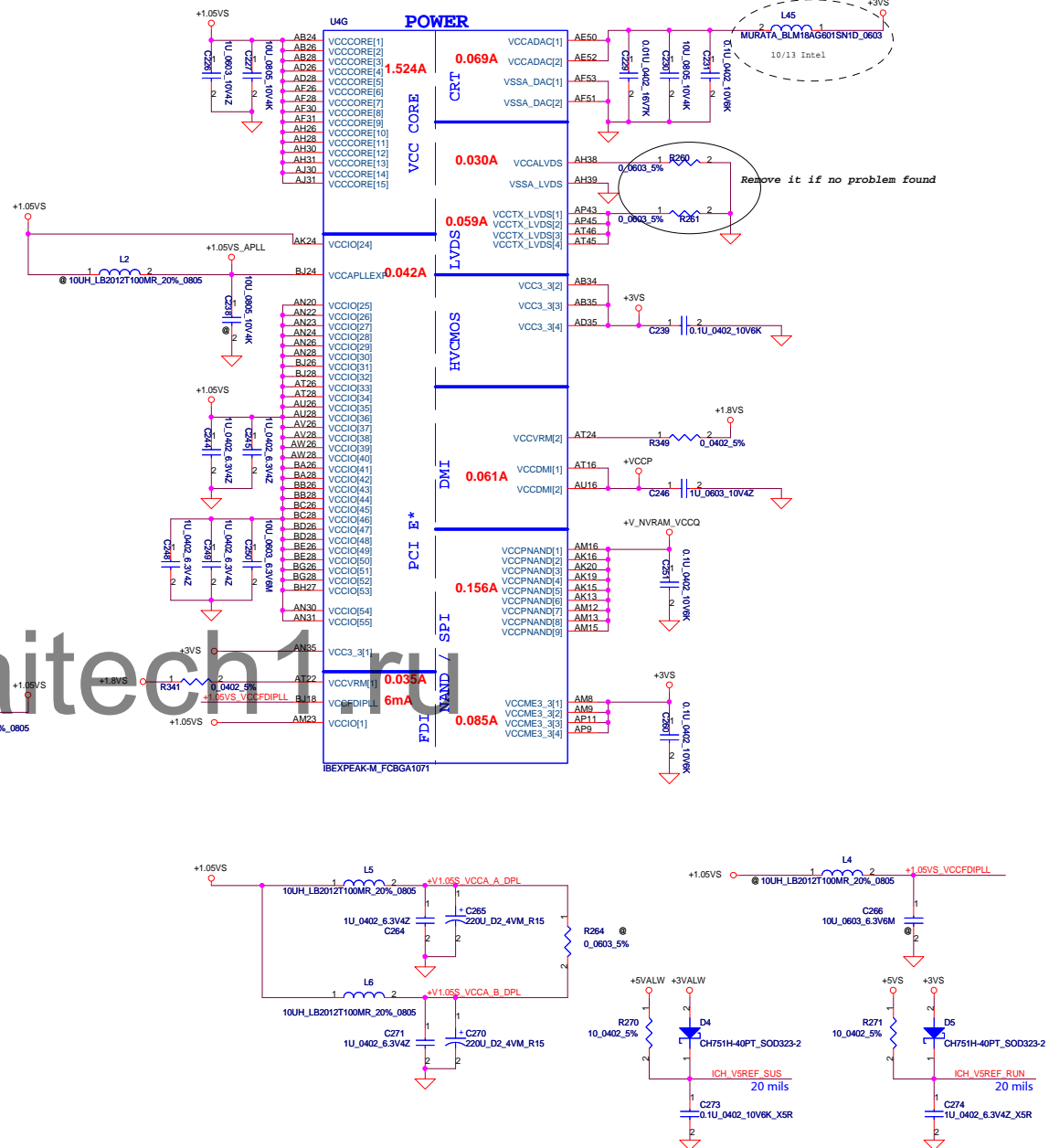
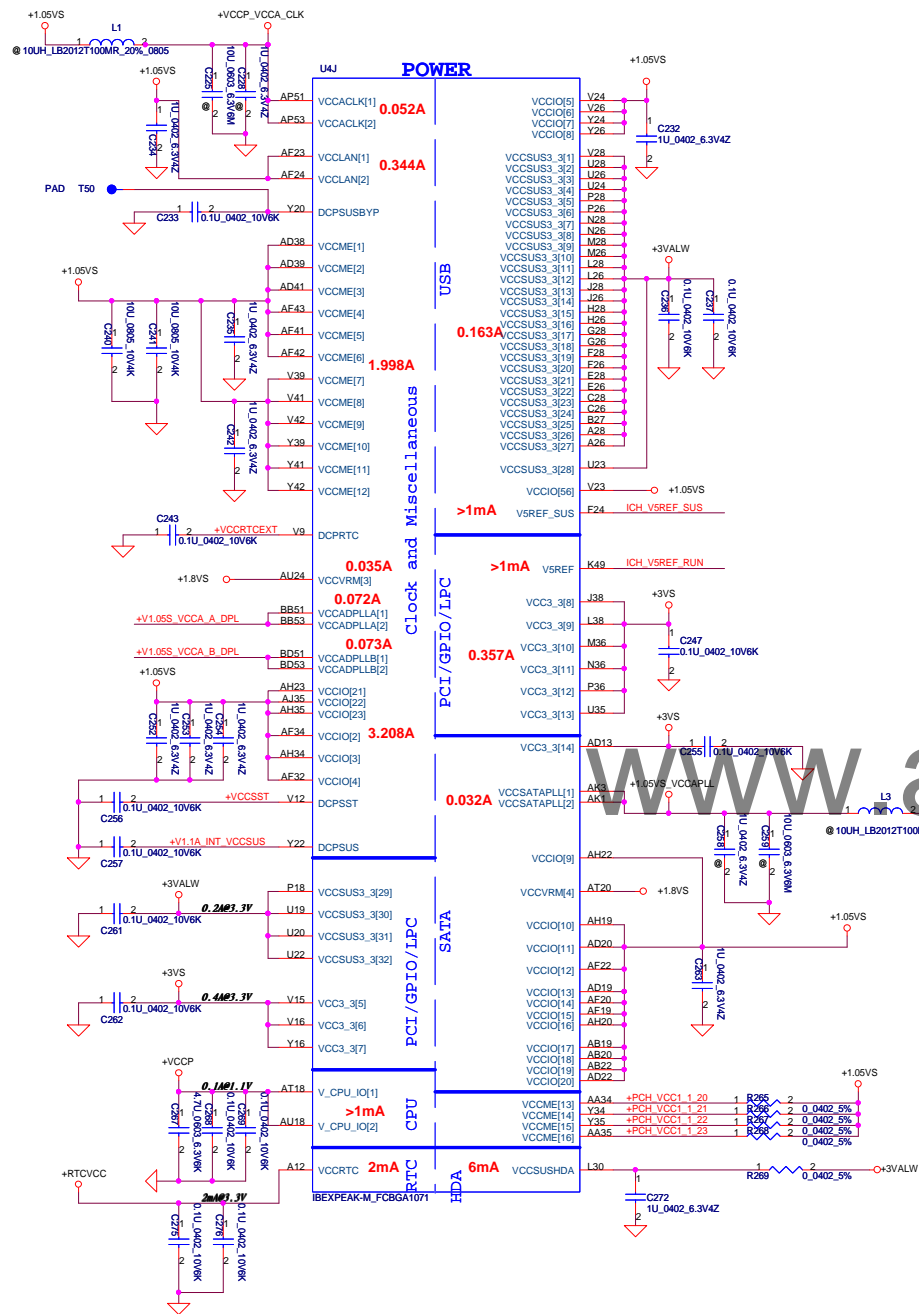




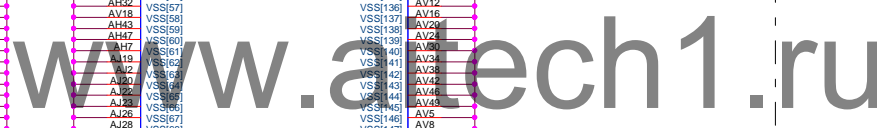
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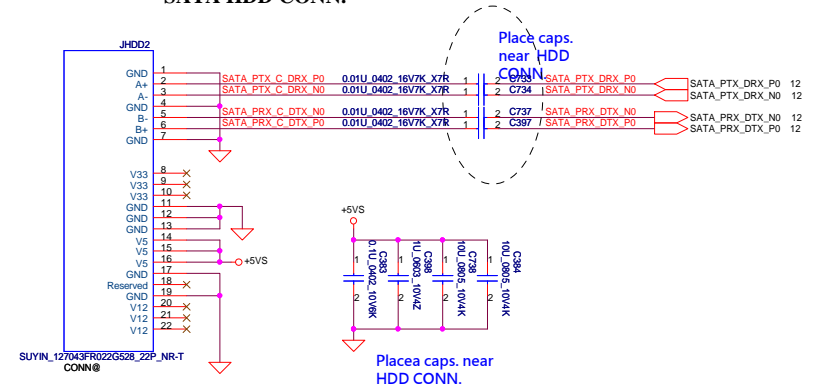




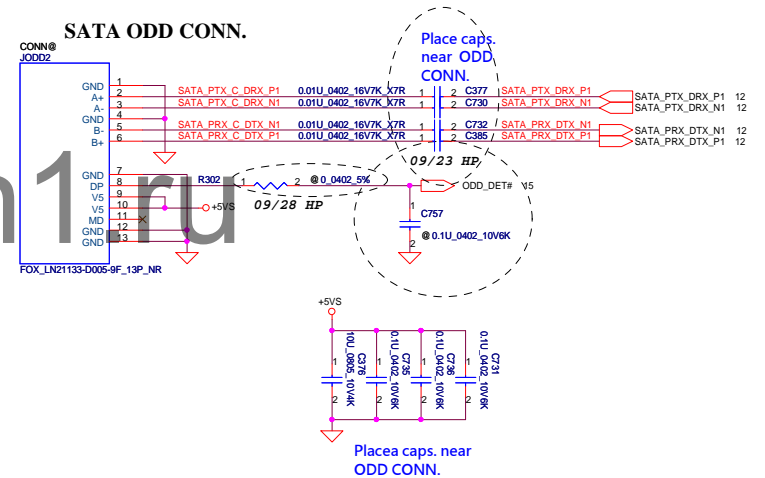
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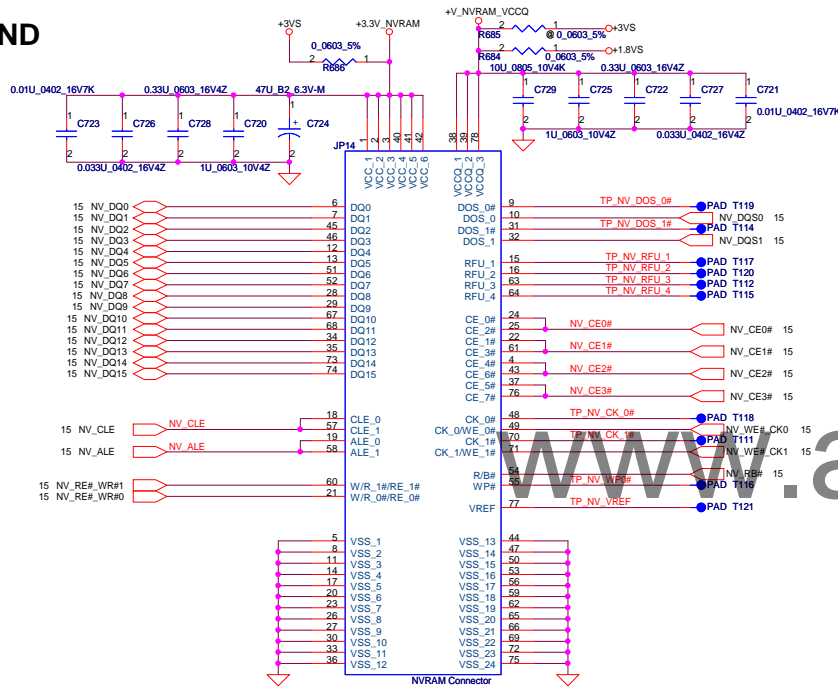
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SATA HDD CONN.

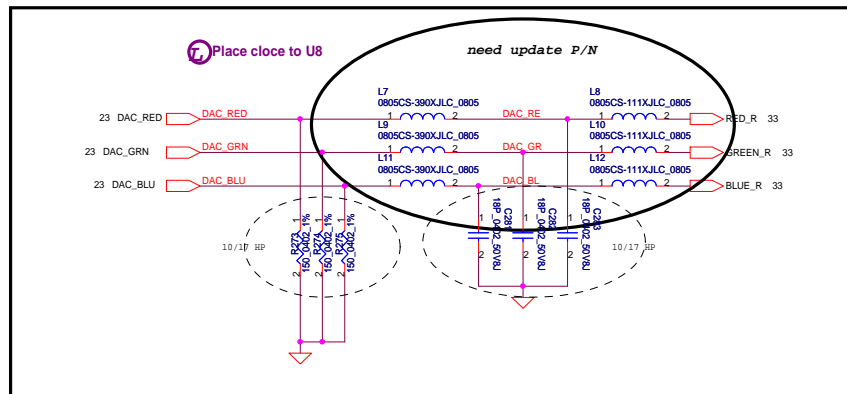
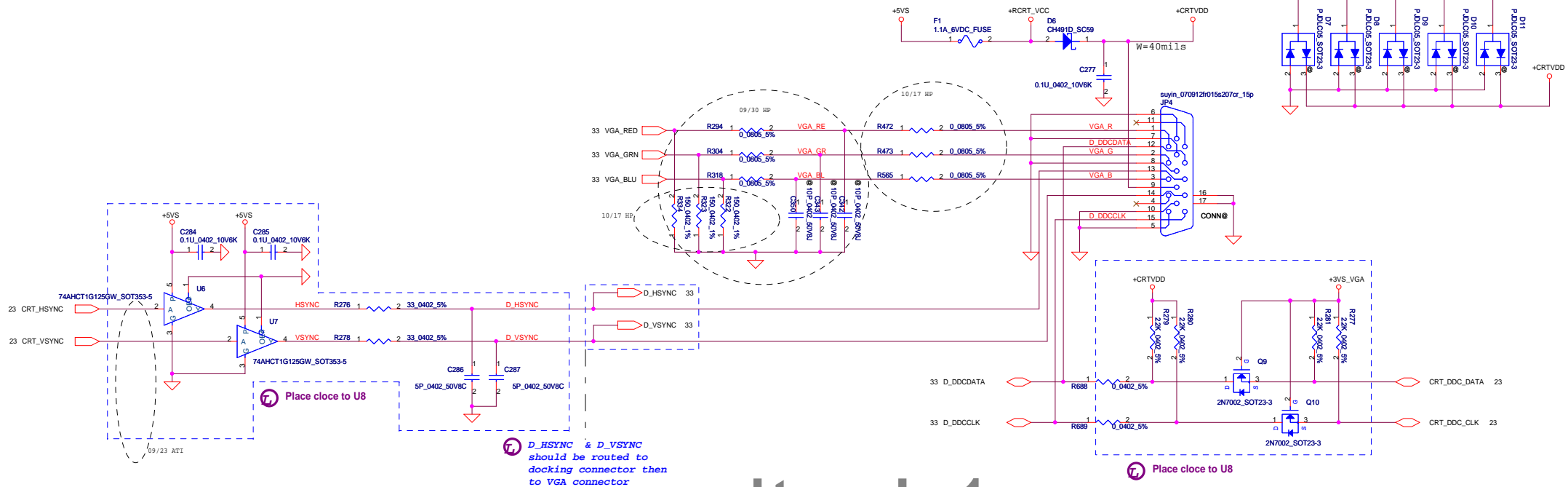
SATA ODD CONN.



NAND



CRT Connector



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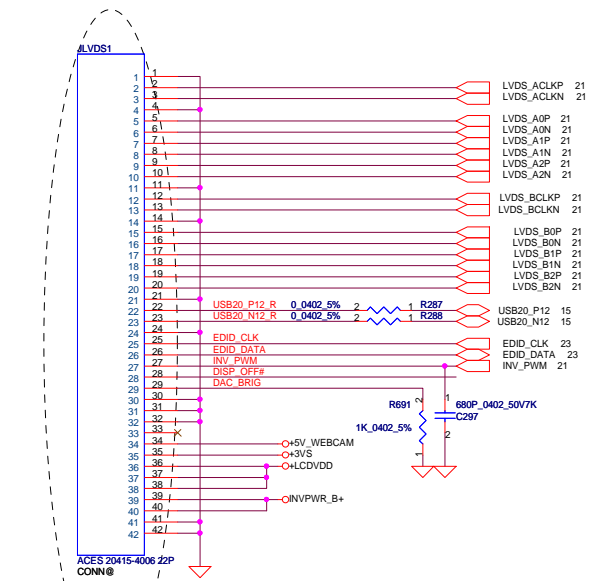
CRT Connector

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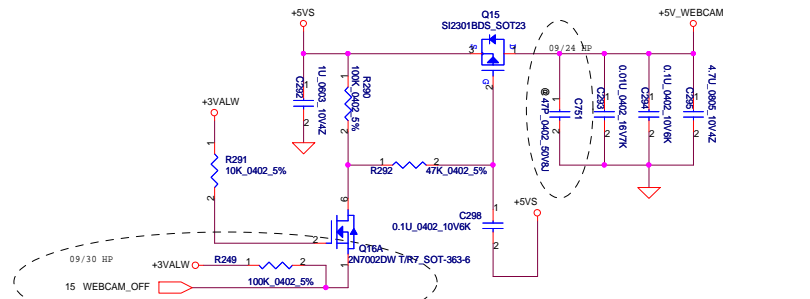
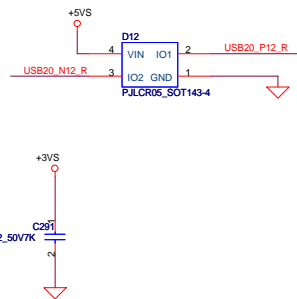
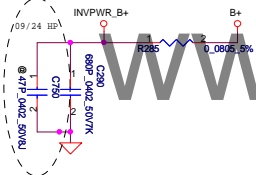
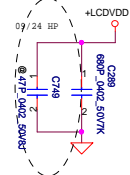
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LCD/PANEL BD. CONN.

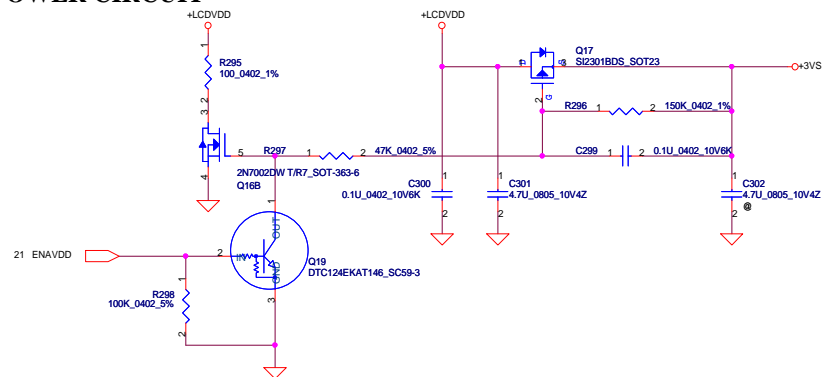


10/01 Change the footprint



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LCD POWER CIRCUIT



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PCIE EXPRESS INTERFACE

5-PIN CONNECTOR:

- 5 POE_CTX_GRP_P15 → AF30 → PCIE_RX0P
- 5 POE_CTX_GRP_N15 → AF31 → PCIE_RX0N
- 5 POE_CTX_GRP_P14 → AF28 → PCIE_RX1P
- 5 POE_CTX_GRP_N14 → AF29 → PCIE_RX1N
- 5 POE_CTX_GRP_P13 → AD30 → PCIE_RX2P
- 5 POE_CTX_GRP_N13 → AD31 → PCIE_RX2N
- 5 POE_CTX_GRP_P12 → AC28 → PCIE_RX3P
- 5 POE_CTX_GRP_N12 → AC29 → PCIE_RX3N
- 5 POE_CTX_GRP_P11 → AB30 → PCIE_RX4P
- 5 POE_CTX_GRP_N11 → AB29 → PCIE_RX4N
- 5 POE_CTX_GRP_P10 → AA32 → PCIE_RX5P
- 5 POE_CTX_GRP_N10 → AA31 → PCIE_RX5N
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- 5 POE_CTX_GRP_N9 → W31 → PCIE_RX6N
- 5 POE_CTX_GRP_P8 → V30 → PCIE_RX7P
- 5 POE_CTX_GRP_N8 → V31 → PCIE_RX7N
- 5 POE_CTX_GRP_P7 → U30 → PCIE_RX8P
- 5 POE_CTX_GRP_N7 → U31 → PCIE_RX8N
- 5 POE_CTX_GRP_P6 → T30 → PCIE_RX9P
- 5 POE_CTX_GRP_N6 → T31 → PCIE_RX9N
- 5 POE_CTX_GRP_P5 → R30 → PCIE_RX10P
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- 5 POE_CTX_GRP_P1 → L30 → PCIE_RX14P
- 5 POE_CTX_GRP_N1 → L31 → PCIE_RX14N
- 5 POE_CTX_GRP_P0 → J30 → PCIE_RX15P
- 5 POE_CTX_GRP_N0 → J31 → PCIE_RX15N

13-PIN CONNECTOR:

- 13 CLK_PEG_PCH → 1 → 4 RPE → CLK_PEG_VSA → AC30 → PCIE_REFCLKP
- 13 CLK_PEG_PCH# → 2 → 4 RPE → CLK_PEG_VSA# → AC32 → PCIE_REFCLKN

19-PIN CONNECTOR:

- NC_PWRGOOD → XN10 → NC_PWRGOOD
- PERSTB → AL27 → PERSTB

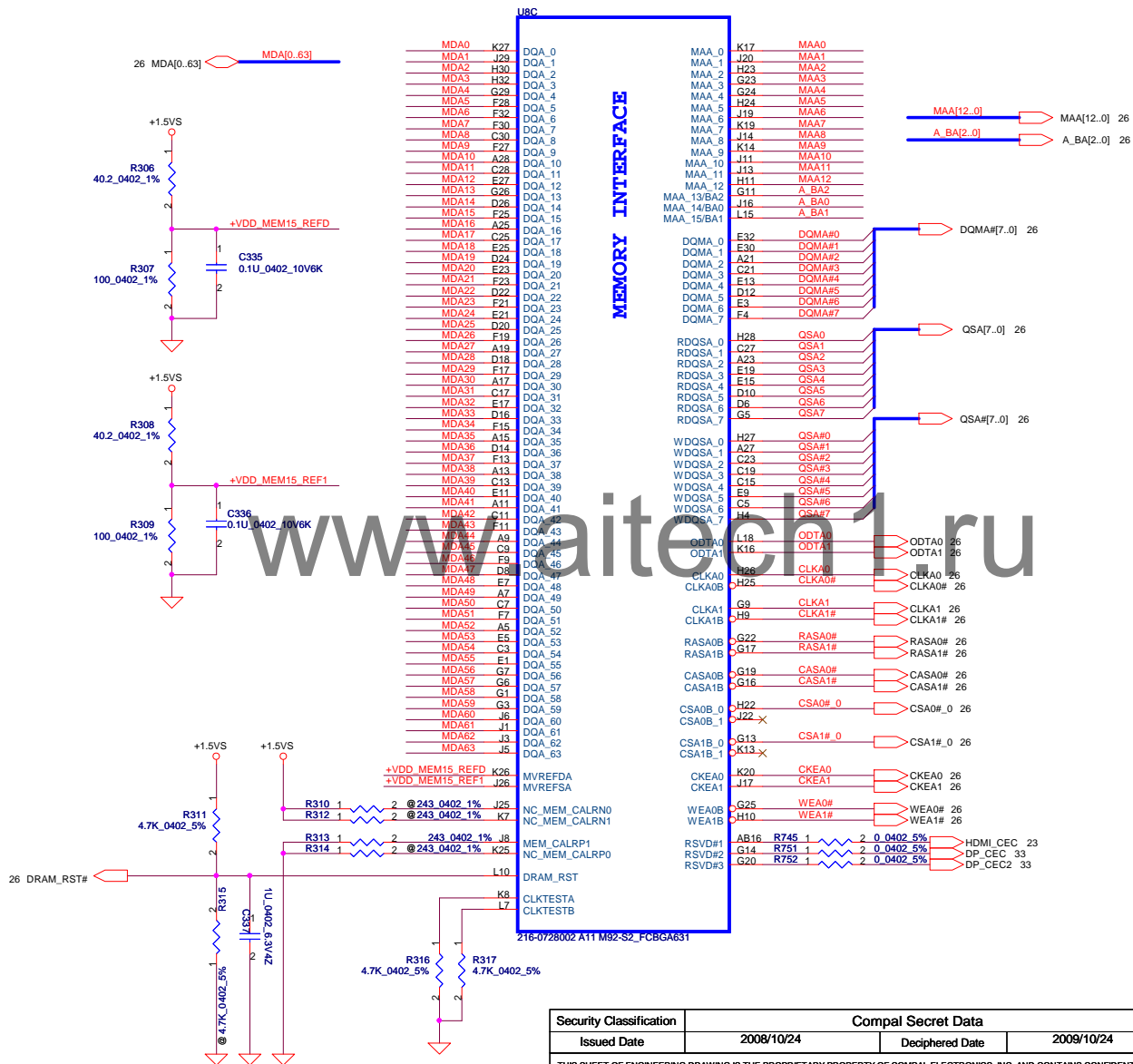
Calibration:

- Y32 → R303 → 2 1.77K 0.402 1% →
- AA22 → R305 → 2 2K 0.402 1% → 0.1VS

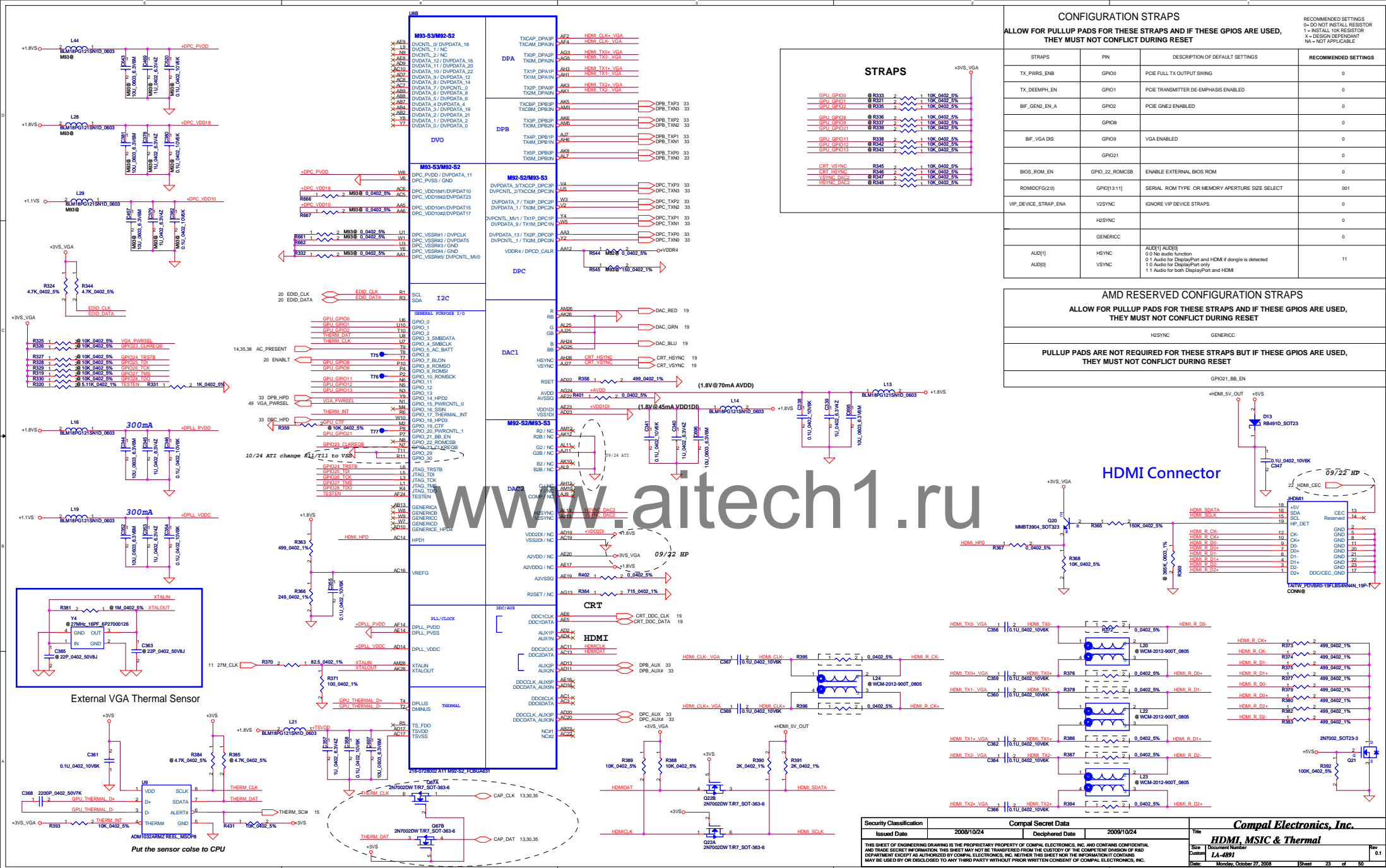
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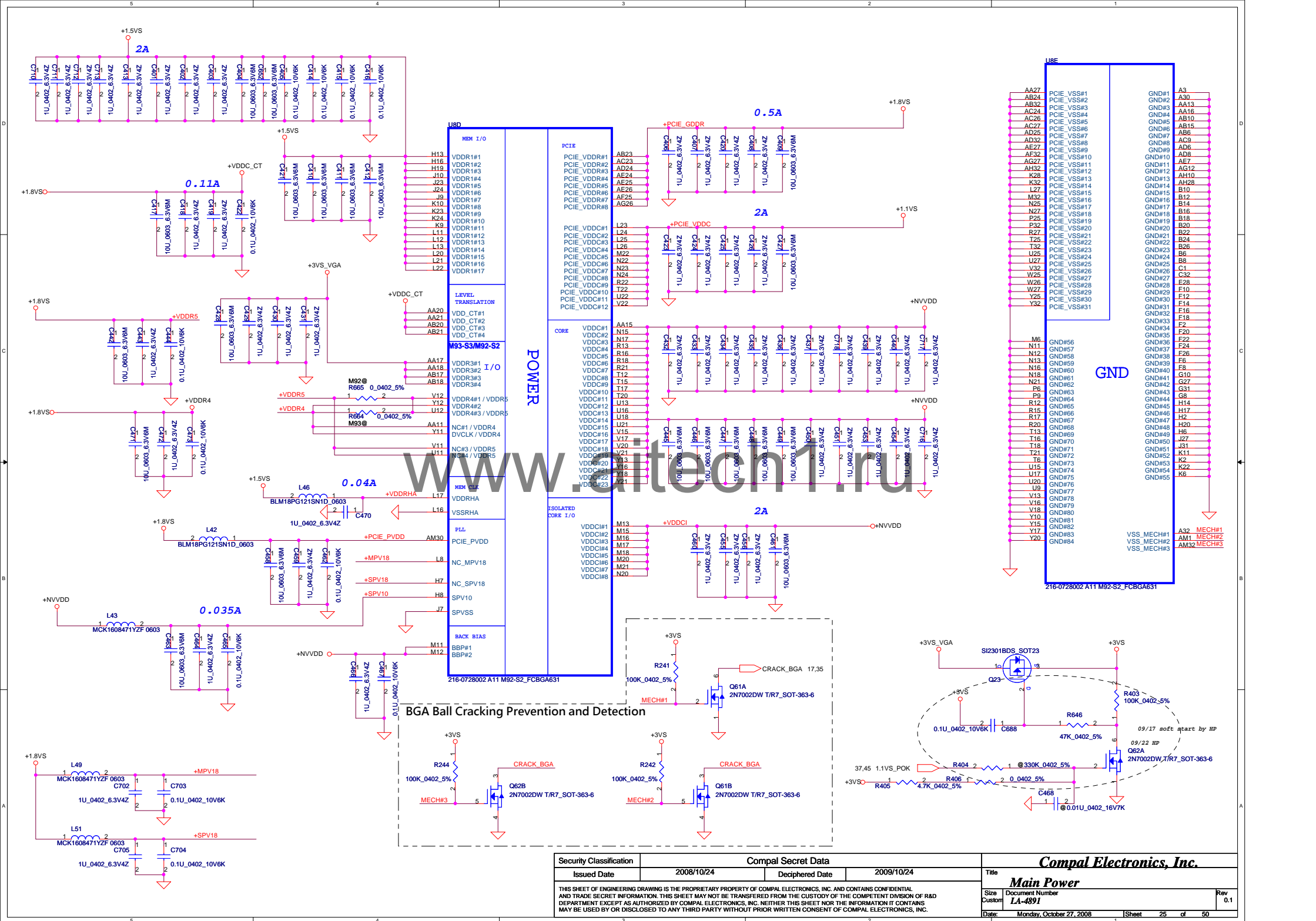
- Remove after boot
- 1,2,15,27,29,32,34 PLT_RST#

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				PEG & LVDS	
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				Monday, October 27, 2008	
				ISPCONT 91 of 80	

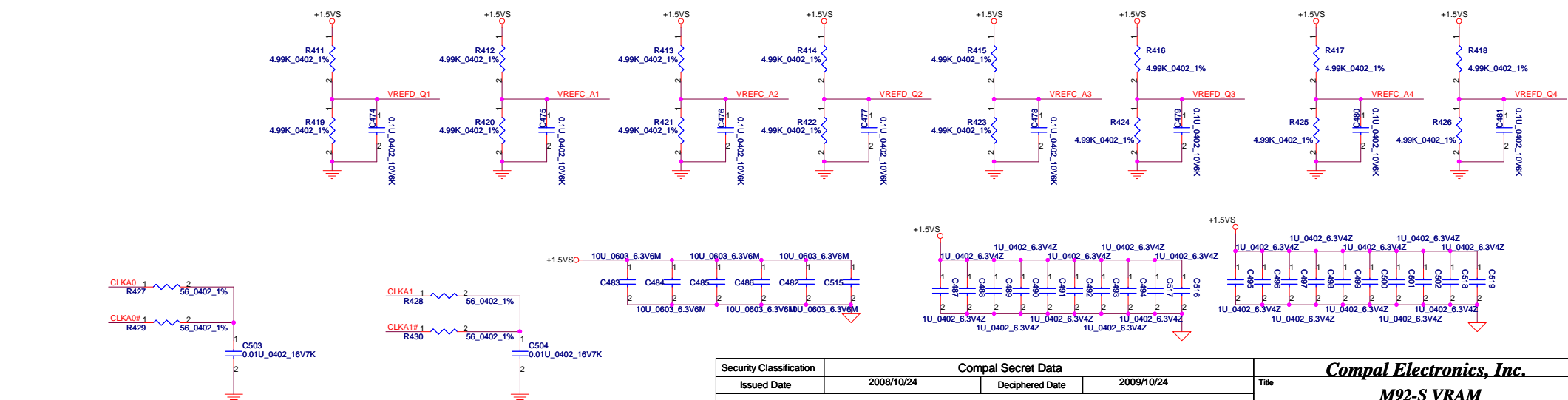
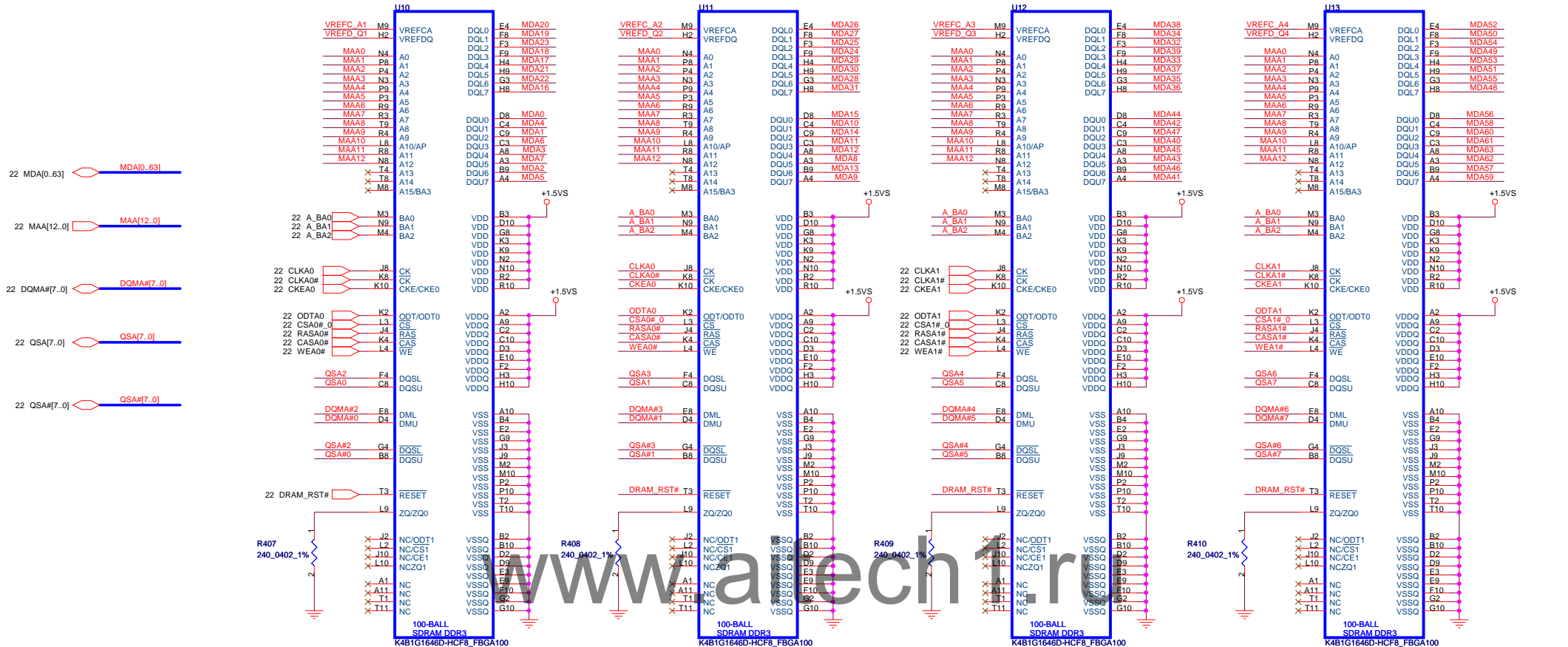


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				Document Number	LA-4891
				Date:	Monday, October 27, 2008
				Sheet	22 of 50

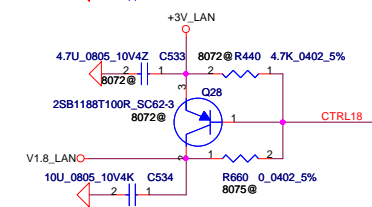
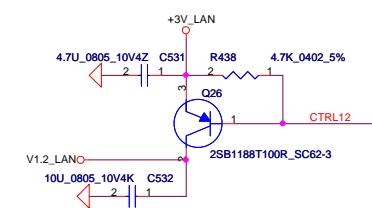
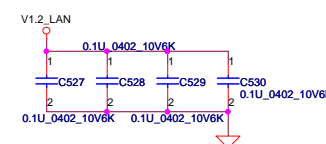
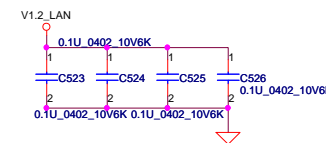
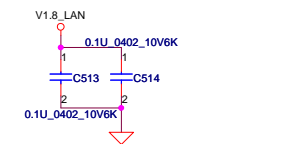




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				Size	Document Number	Rev 0.1
				Date: Monday, October 27, 2008		
				Sheet	27	of 50

[illegible]

MDC 1.5 Conn.

12 HDA_SDOUT_MDC
12 HDA_SYNC_MDC
12 HDA_SDI1_MDC
12 HDA_BIT_CLK_MDC
12 HDA_RST#_MDC
15 MODEM_DISABLE#

3V3W
3V3S
3V3V

U18
U19
U20
MC74AHC1G08DFT2G SC70 5P

JP13
CONN@ ACES_88020-12101_12P

R482
R483
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INT_KBD_CONN.

35 KSO[0..13] KSO[0..13]

35 KSI[0..7] KSI[0..7]

The diagram shows the pinout for the INT_KBD_CONN. connector. It includes a table of pin numbers and signal names, and a detailed schematic of the connector pins and their internal connections to various components like CP1, CP2, CP3, CP4, CP5, CP6, and CP7.

Pin	Signal	Pin	Signal
1	KSO13	2	KSO13
2	KSO12	3	KSO12
3	KSO9	4	KSO9
4	KSI D 9	5	KSI D 9
5	KSI D 11	6	KSI D 11
6	KSI D 13	7	KSI D 13
7	KSI7	8	KSI7
8	KSI D 6	9	KSI D 6
9	KSI D 5	10	KSI D 5
10	KSO1	11	KSO1
11	KSO10	12	KSO10
12	KSO6	13	KSO6
13	KSO7	14	KSO7
14	KSO4	15	KSO4
15	KSO8	16	KSO8
16	KSO3	17	KSO3
17	KSI D 3	18	KSI D 3
18	KSI D 1	19	KSI D 1
19	KSI D 2	20	KSI D 2
20	KSI D 4	21	KSI D 4
21	KSI D 0	22	KSI D 0
22	KSI D 10	23	KSI D 10
23	KSI D 12	24	KSI D 12
24	KSI D 8	25	KSI D 8
25	KSI D 14	26	KSI D 14
26	KSO5	27	KSO5
27	KSO2	28	KSO2
28	KSO0	29	KSO0
29	KSO11	30	KSO11

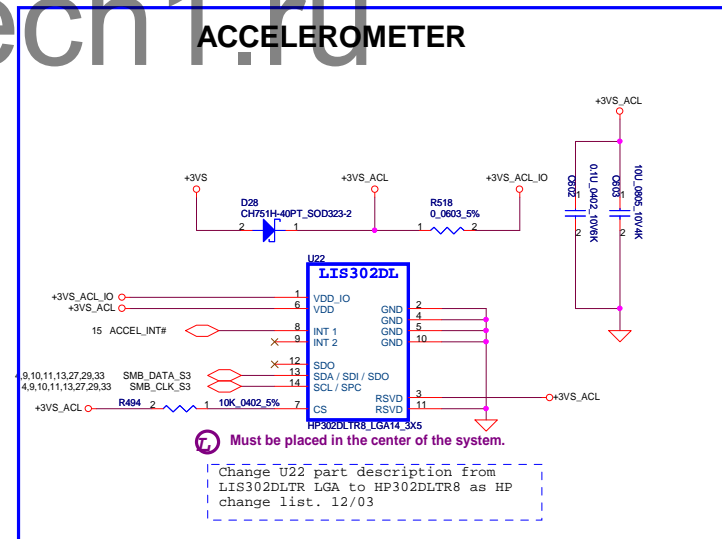
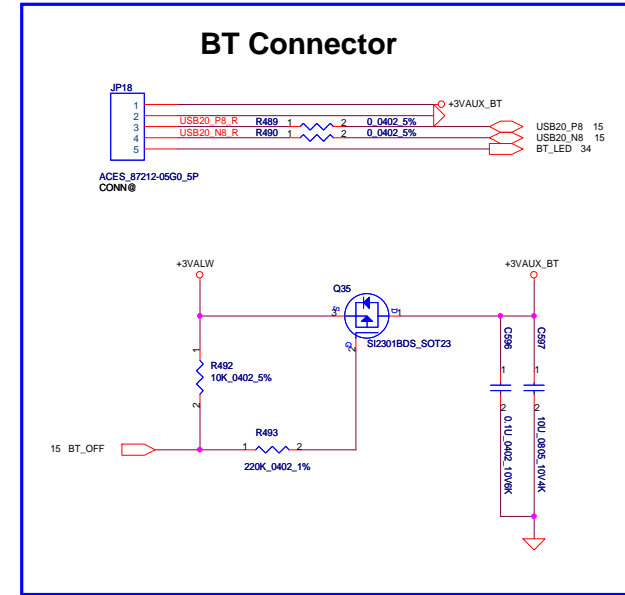
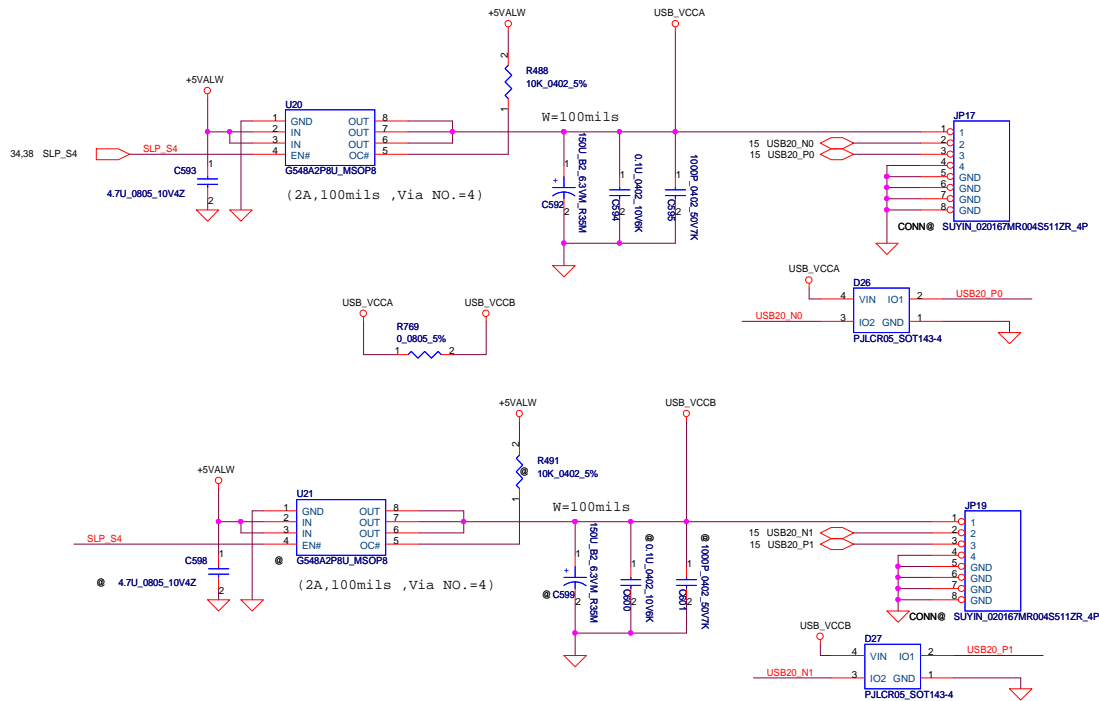
CONN# HIROSE FH12HP-30S-1S1 55 30P

The diagram also shows the internal connections of the connector pins to various components like CP1, CP2, CP3, CP4, CP5, CP6, and CP7. For example, CP1 is connected to KSO12, KSO6, KSI D 9, and KSI D 11. CP2 is connected to KSI D 10, KSI7, KSI D 6, and KSI D 5. CP3 is connected to KSI D 13, KSO10, KSO6, and KSO7. CP4 is connected to KSO1, KSO8, KSO3, and KSI D 3. CP5 is connected to KSO4, KSI D 2, KSI D 4, and KSI D 0. CP6 is connected to KSI D 1, KSI D 12, KSI D 8, and KSI D 14. CP7 is connected to KSO5, KSO2, KSO0, and KSI D 11.

Power button

TrackPoint CONN.

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				Date	Monday October 27 2008	Sheet 30 of 50

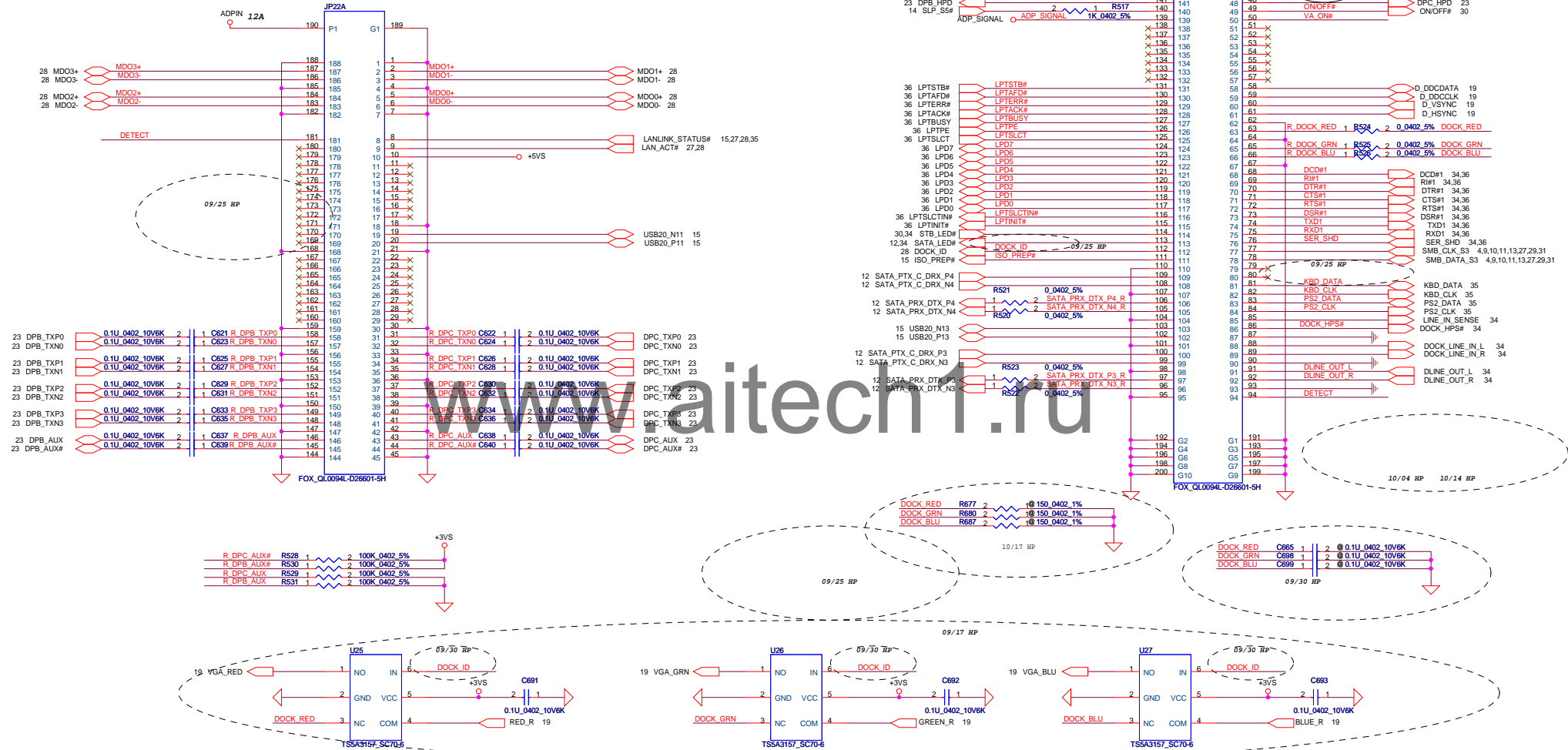
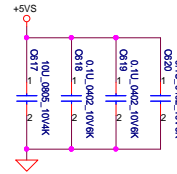
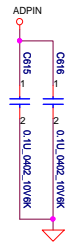


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DOCK CONN. 190PIN

DOCKING CONNECTOR

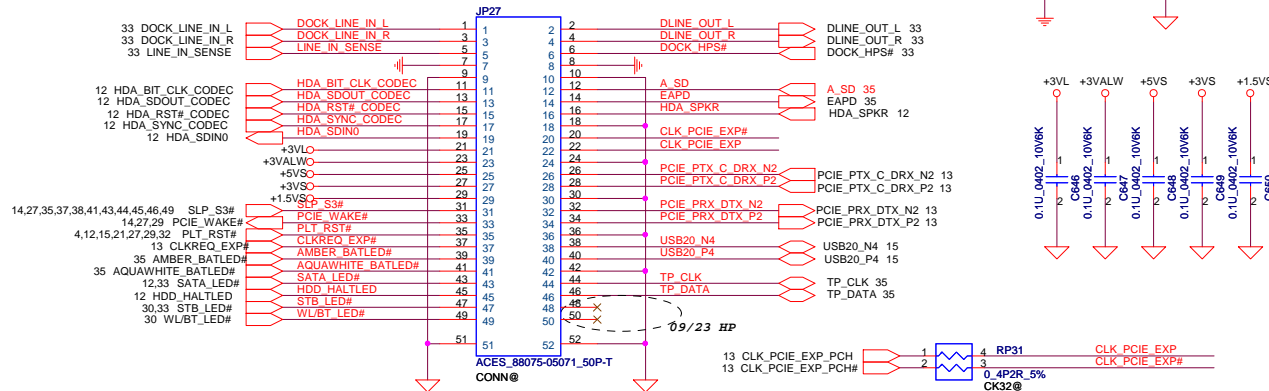
- (2) PS/2 Interfaces
 (2) USB 2.0 channels
 (2) SATA Channels
 (2) Display Port Channels
 (1) Serial Port
 (1) Parallel Port
 (1) Line In
 (1) Line Out
 (1) RJ45 (10/100/1000)
 (1) VGA
 (1) 2 LAN indicator LED's
 (1) Power Button
 (1) I2C interface



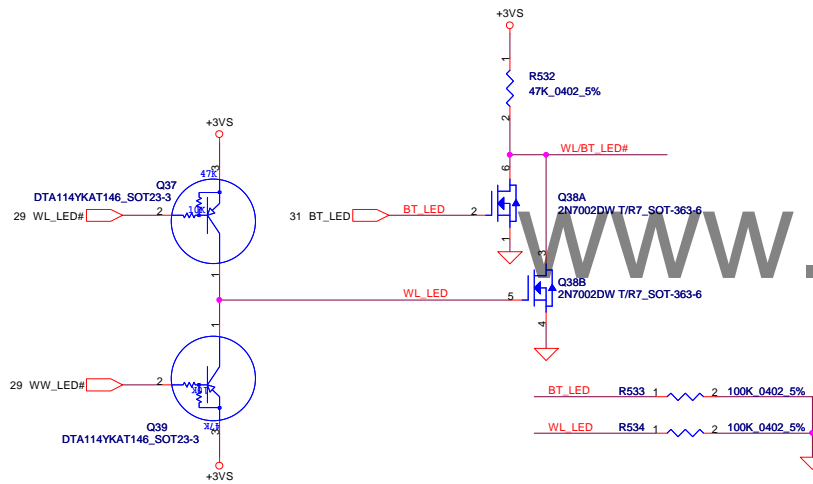
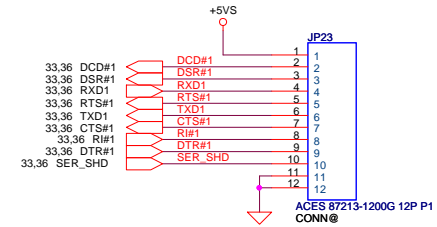
IN	NC<-->COM	NO<-->COM
L	ON	OFF
H	OFF	ON

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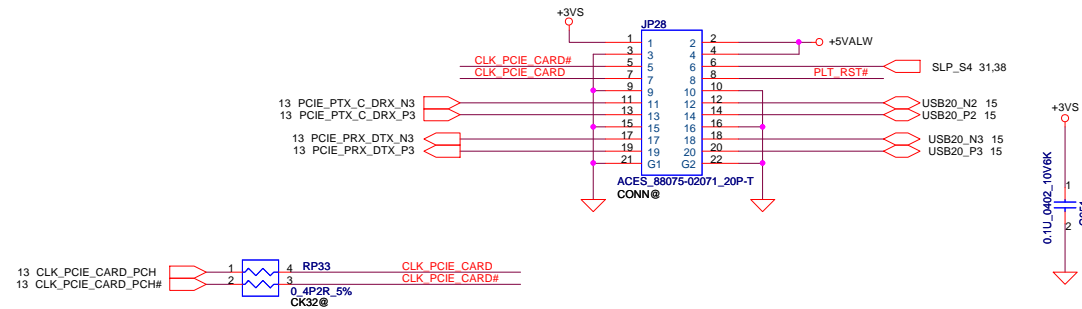
Audio/Express Card/TP/LEDs Connector



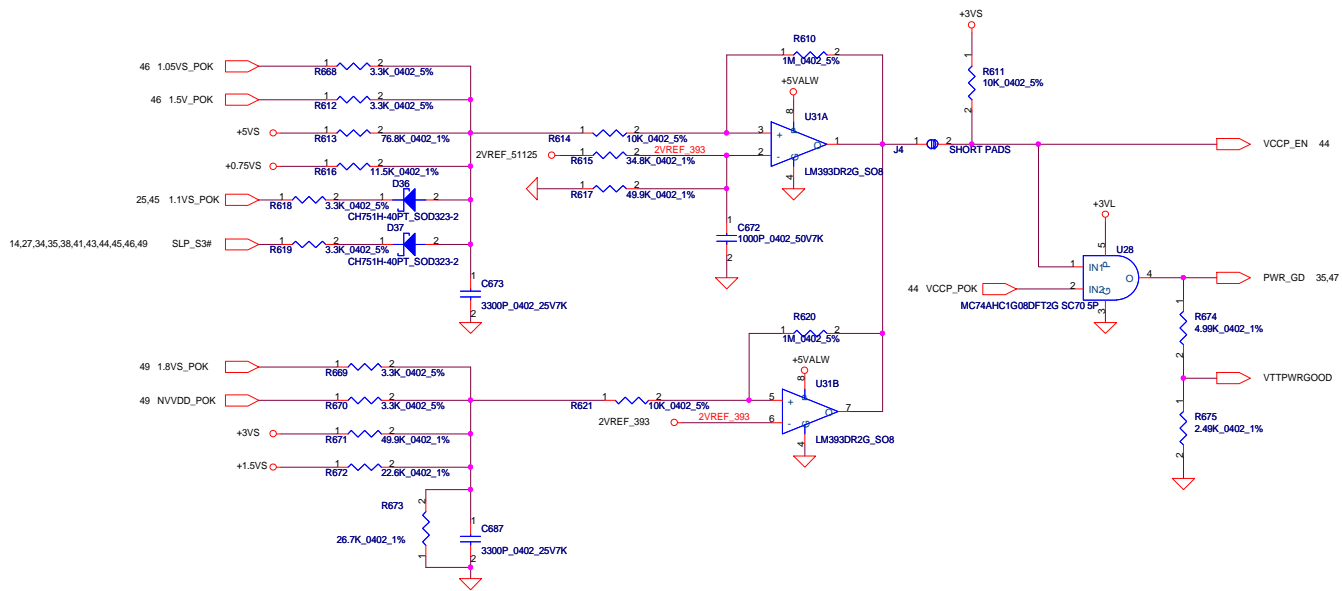
Serial Port CONN



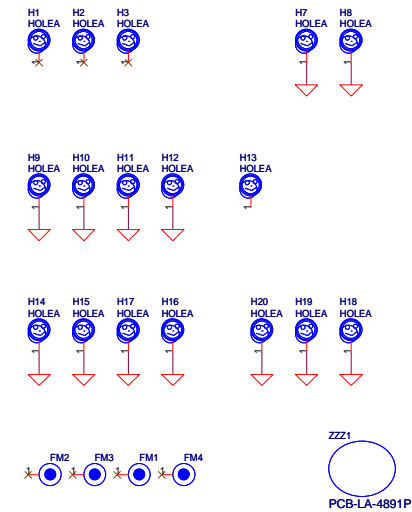
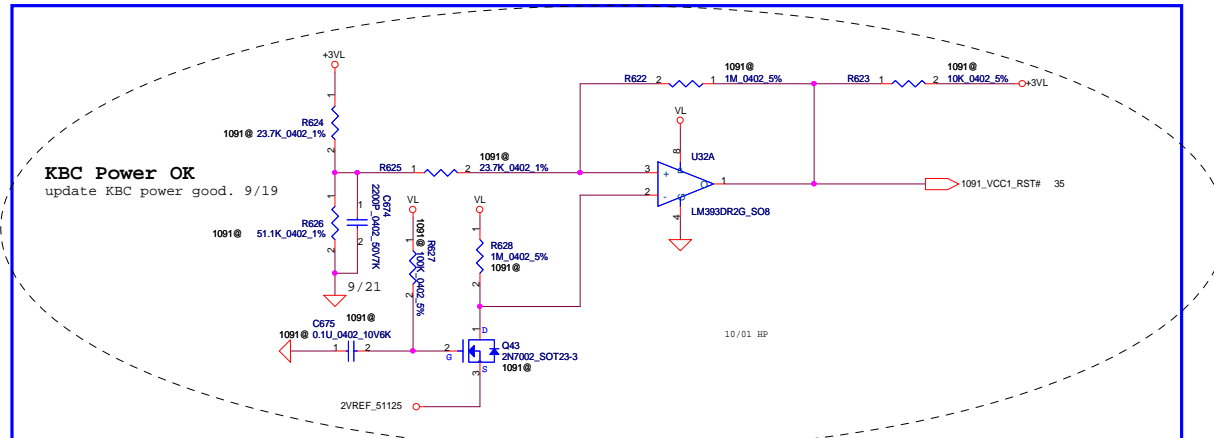
Card Reader 7 in 1 + 2 Port USB Connector



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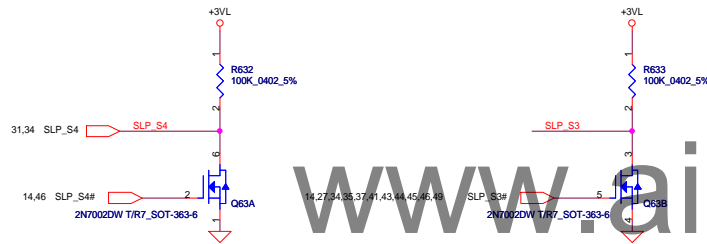
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+5VALW to +5VS Transfer

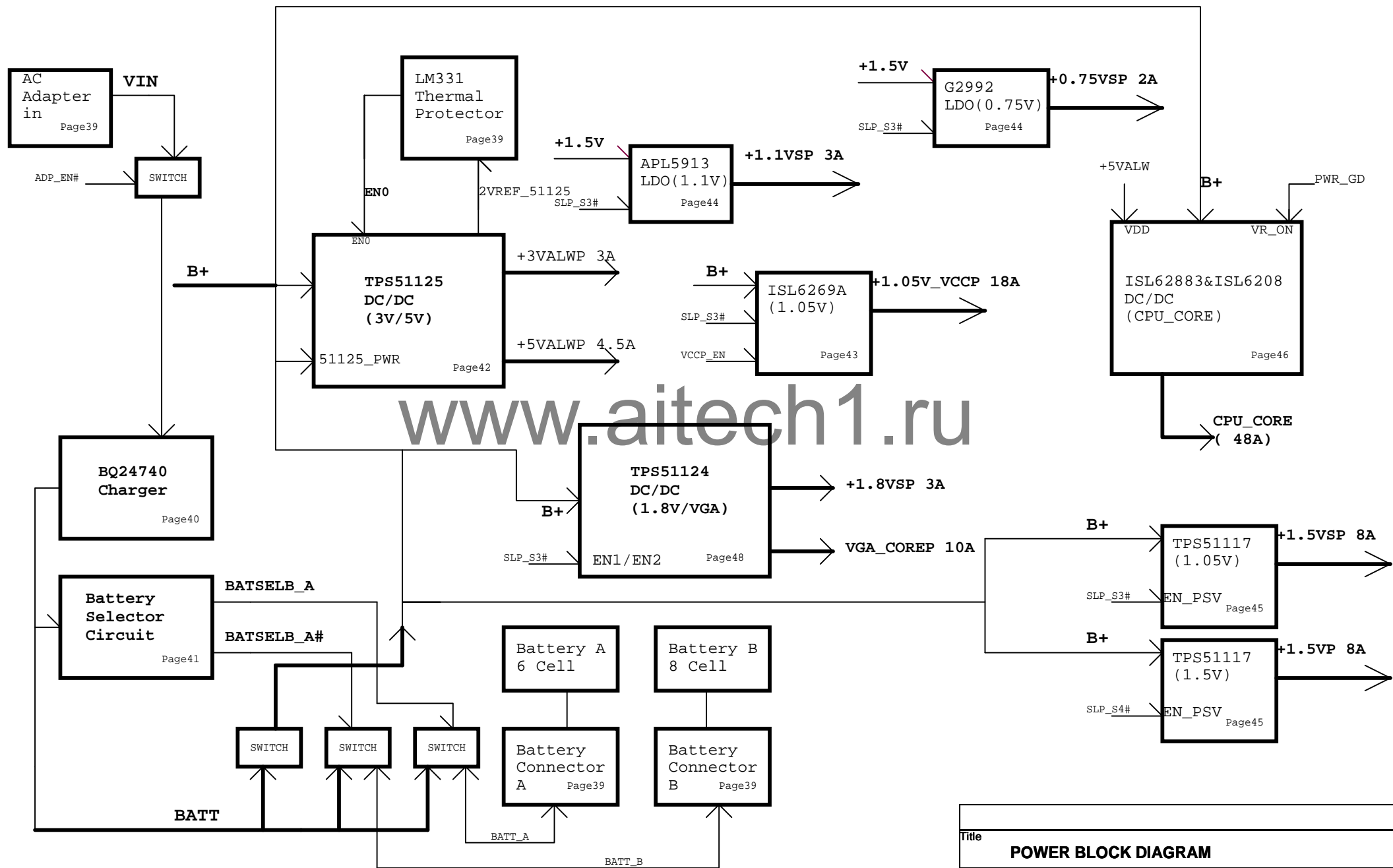
The diagram illustrates the transfer of power from the +5VALW supply to the +5VS supply. A 5V regulator (U34, SI7325DN-T1-E3_PAK1212-8) is used for this purpose. The input of the regulator is connected to the +5VALW supply and a 100uF 0805-10V4K capacitor (C678). The output of the regulator is connected to the +5VS supply and a 100uF 0805-10V4K capacitor (C681). The regulator is labeled 'RUNON'.

+1.5V to +1.5VS Transfer

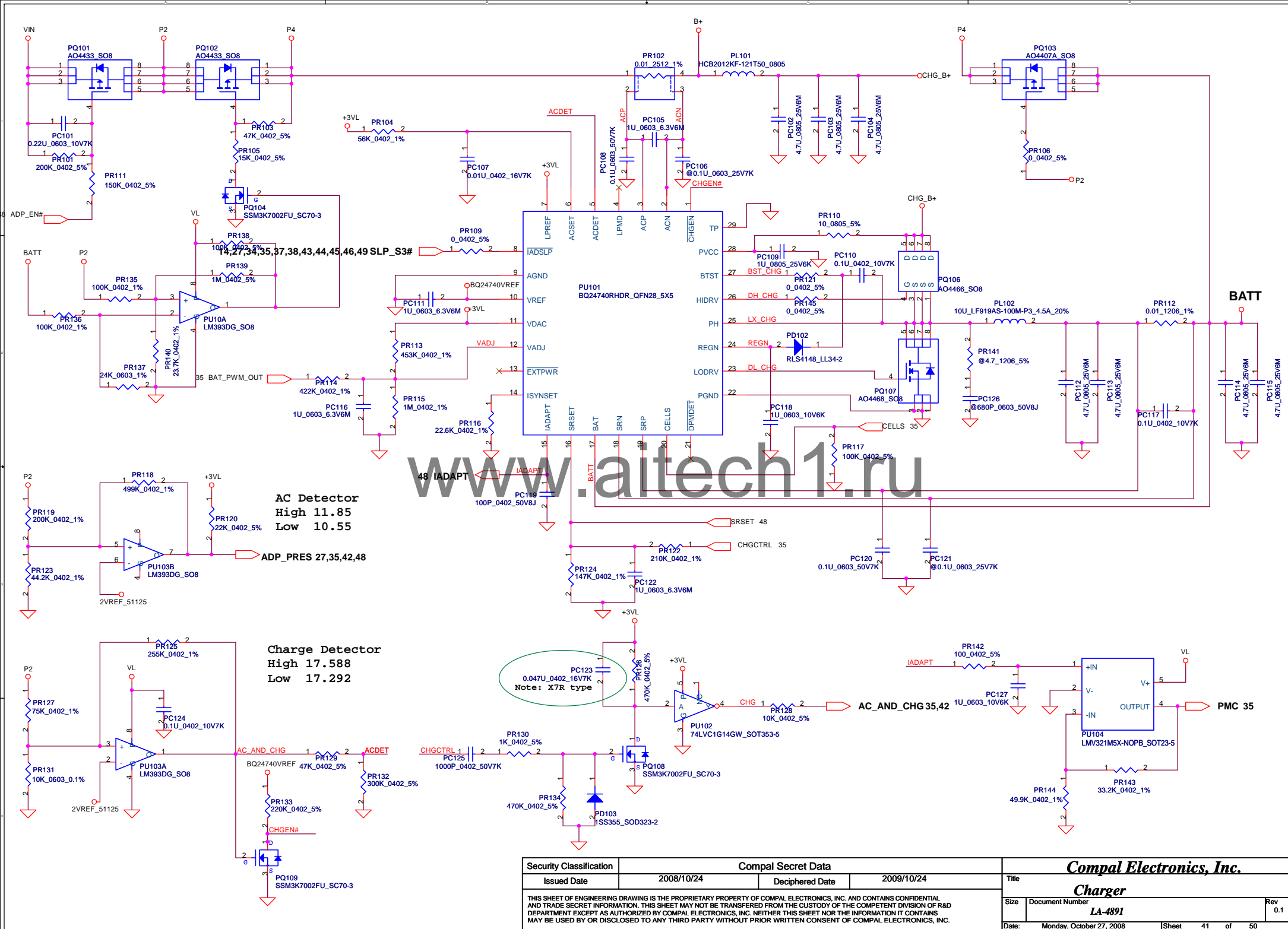
The diagram illustrates the transfer of a signal from a +1.5V source to a +1.5VS source using a 74VHC04 inverter (Q44). The inverter's pin 1 is connected to ground. Pin 2 is connected to the +1.5V source, and pin 3 is connected to the +1.5VS source. A 0.1uF, 10V/6K capacitor is connected between pins 2 and 3. A 10k pull-up resistor is connected to pin 2, and a 100k pull-down resistor is connected to pin 3. The output of the inverter (pin 3) is connected to the +1.5VS source. A RUN/ON label is present at the bottom.



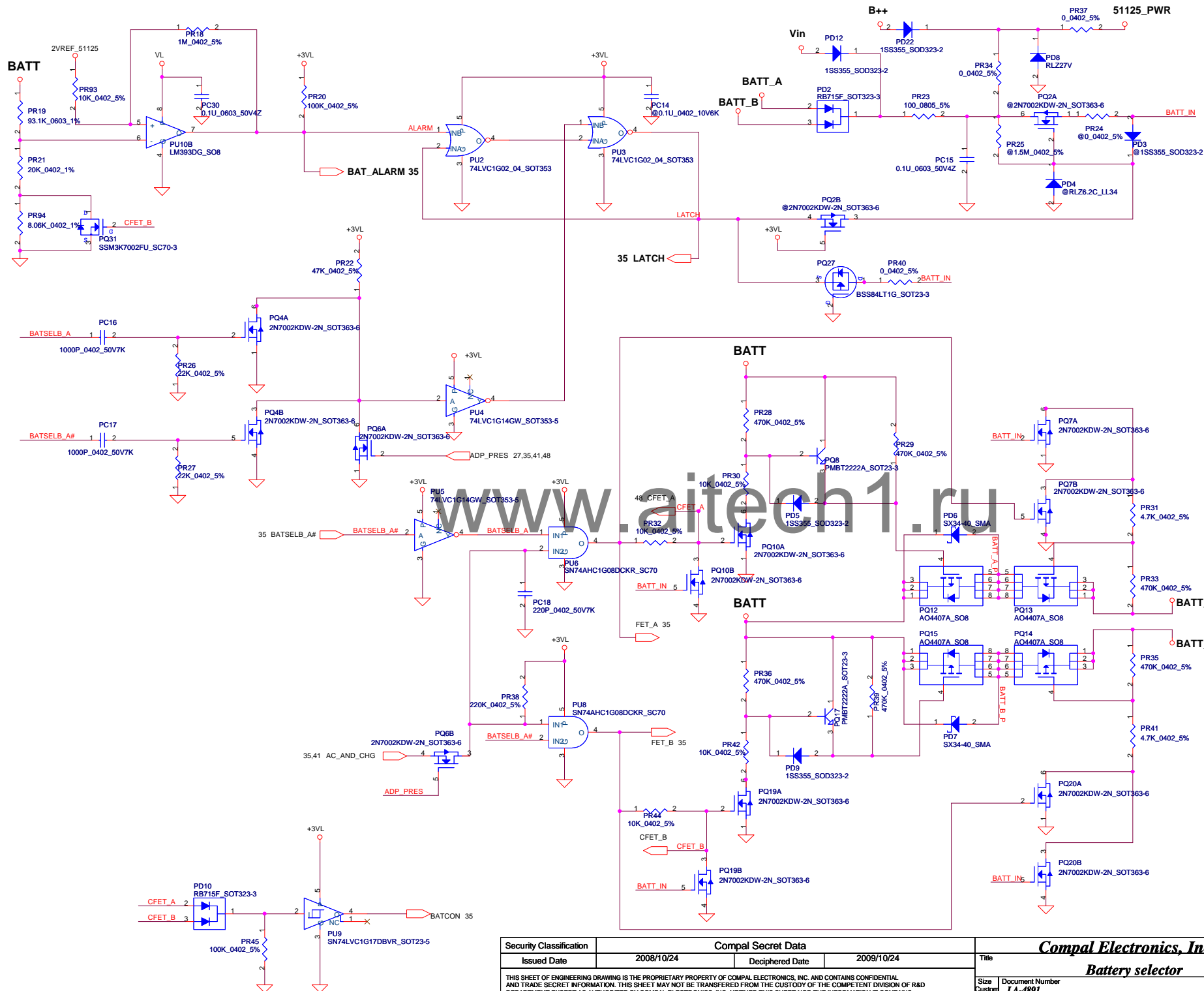
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				DC/DC Circuits		
				Size	Document Number LA-4391	
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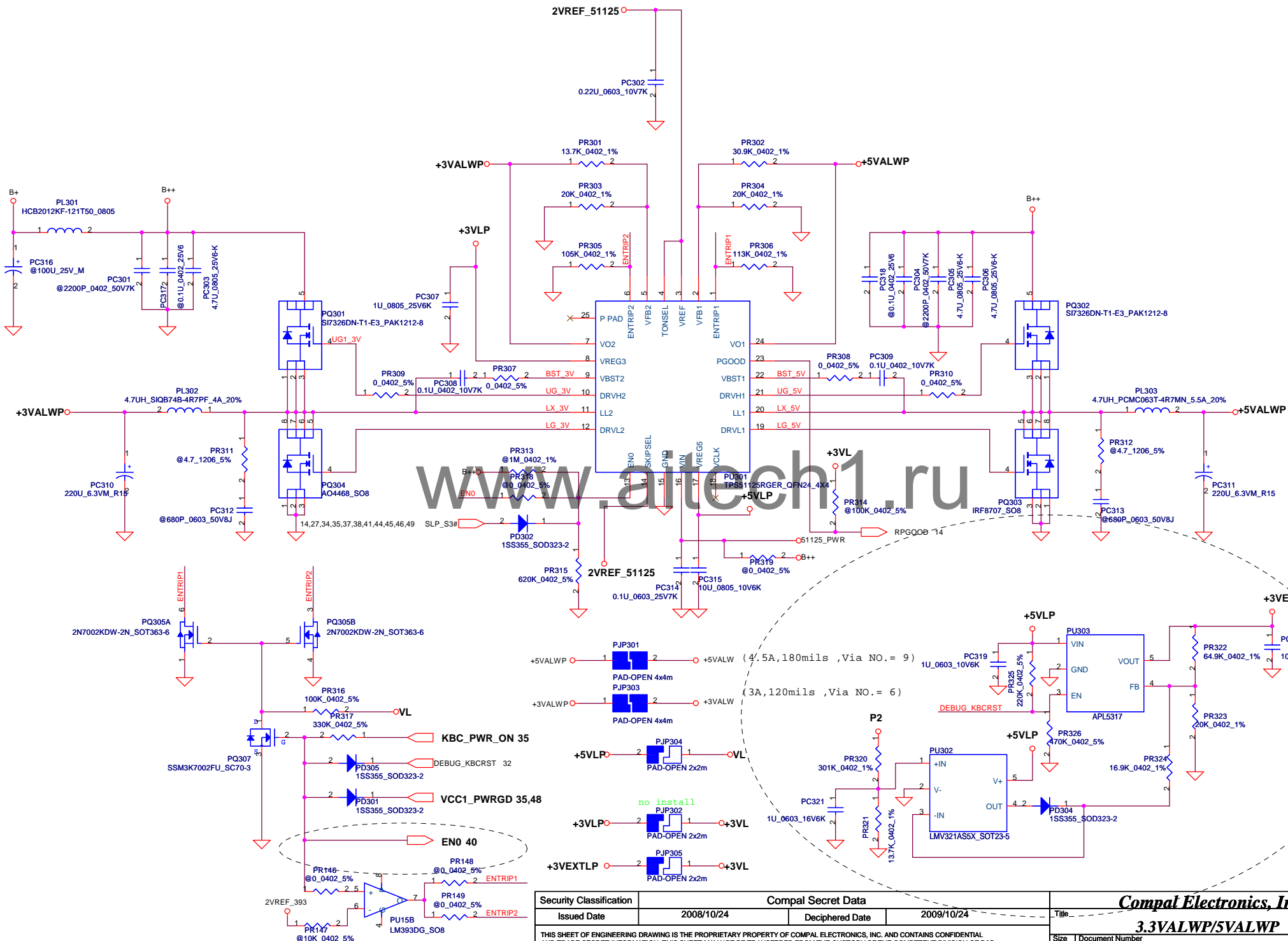
Title		
POWER BLOCK DIAGRAM		
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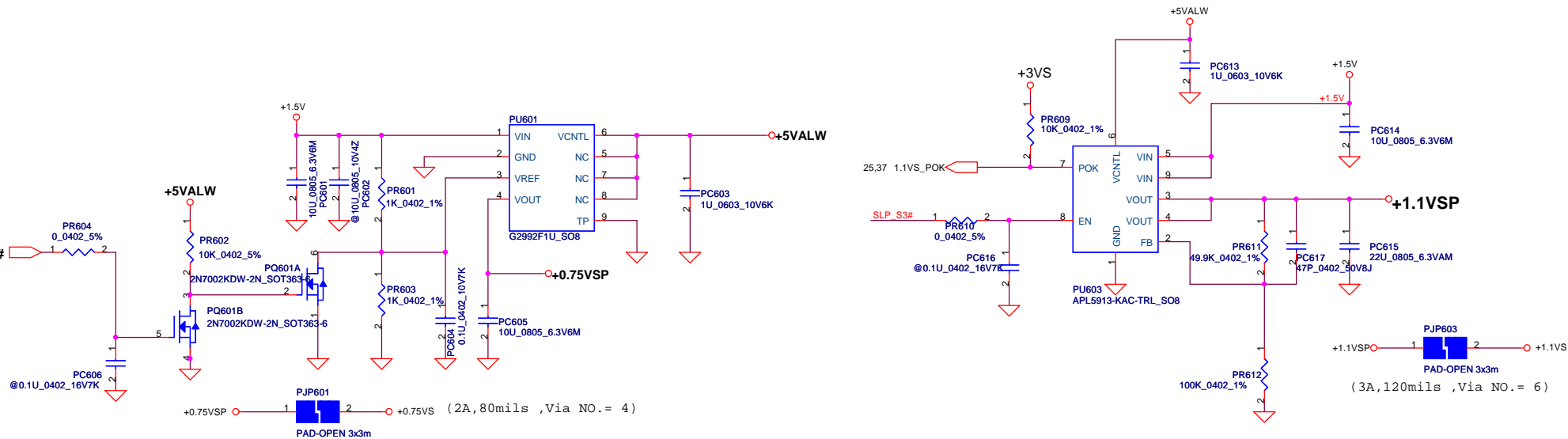


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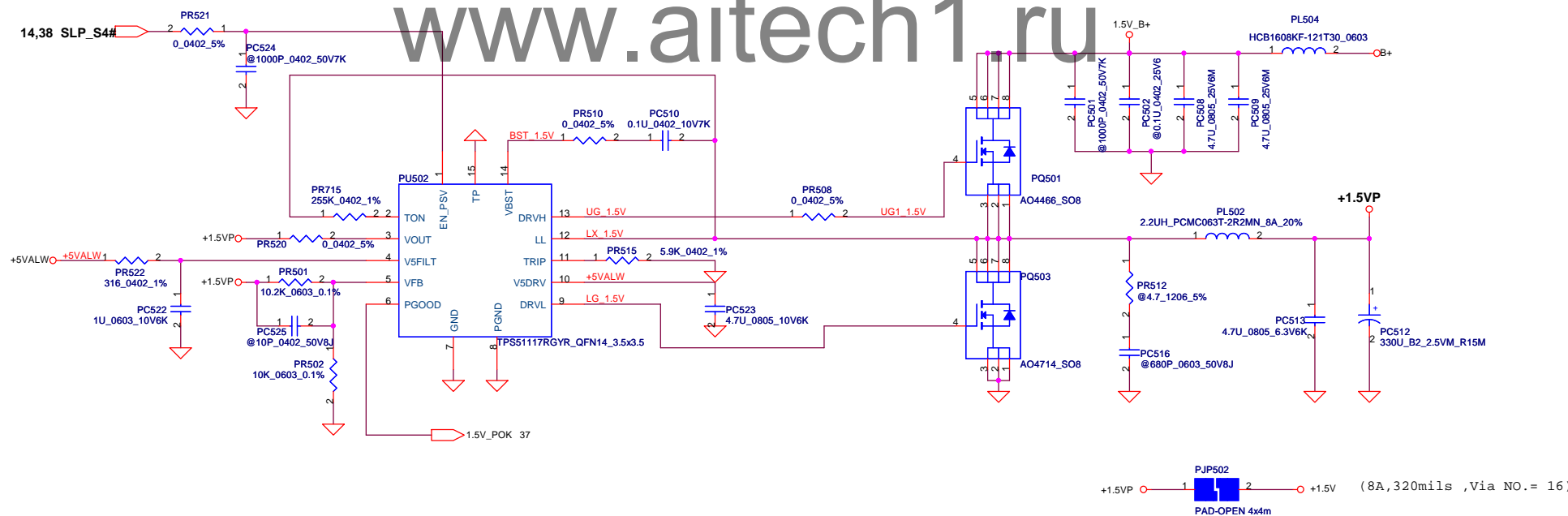
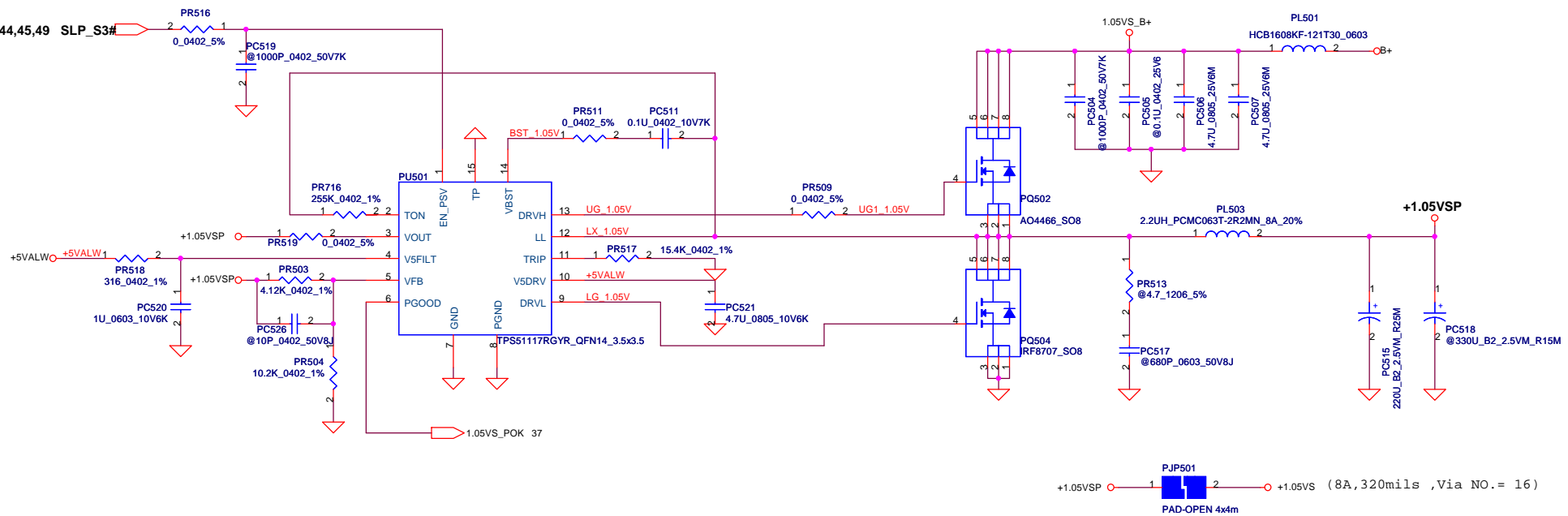
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